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AN

HISTORY

OF THE

EARTH,

AND

ANIMATED NATURE.

BY

OLIVER GOLDSMITH.

IN EIGHT VOLUMES.

A NEW EDITION.

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AN HISTORY OF BIRDS.

PART I.

AN

HISTORY

OF

BIRDS.

CHAP. I.

Of Birds in General.

WE are now come to a beautiful and loquacious race of animals, that embelliſh our foreſts, amuſe our walks, and exclude ſolitude from our moſt ſhady retirements. From theſe man has nothing to fear; their pleaſures, their deſires, and even their animoſities, only ſerve to enliven the general picture of Nature, and give harmony to meditation.

No part of Nature appears deſtitute of inhabitants. The woods, the waters, the depths of the earth, have their reſpective tenants; while the yielding air, and thoſe tracts of ſeeming

ſpace where man never can aſcend, are alſo paſſed through by multitudes of the moſt beautiful beings of the creation.

Every order and rank of animals ſeems fitted for its ſituation in life; but none more apparently that birds; they ſhare in common with the ſtronger race of quadrupedes the vegetable ſpoils of the earth, are ſupplied with ſwiftneſs to compenſate for their want of force; and have a faculty of aſcending into the air to avoid that power which they cannot oppoſe.

The bird ſeems formed entirely for a life of eſcape; and every part of the anatomy of the animal ſeems calculated for ſwiftneſs. As it is deſigned to riſe upon air, all its parts are proportionably light, and expand a large ſurface without ſolidity.

In a comparative view with man, their formation ſeems much ruder and more imperfect; and they are in general found incapable of the docility even of quadrupedes. Indeed, what great degree of ſagacity can be expected in animals whoſe eyes are almoſt as large as their brain? However, though they fall below quadrupedes in the ſcale of Nature, and are leſs imitative of human endowments; yet they hold the next rank, and far ſurpaſs fiſhes and inſects, both in the ſtructure of their bodies and in their ſagacity.

As in mechanics the moſt curious inſtruments are

are generally the moſt complicated, ſo it is in anatomy. The body of man preſents the greateſt variety upon diſſection; quadrupedes, leſs perfectly formed, diſcover their defects in the ſimplicity of their conformation; the mechaniſm of birds is ſtill leſs complex; fiſhes are furniſhed with fewer organs ſtill; whilſt inſects, more imperfect than all, ſeem to fill up the chaſm that ſeparates animal from vegetable nature. Of man, the moſt perfect animal, there are but three or four ſpecies; of quadrupedes, the kinds are more numerous; birds are more various ſtill; fiſhes yet more; but inſects afford ſo very great a variety, that they elude the ſearch of the moſt inquiſitive purſuer.

Quadrupedes, as was ſaid, have ſome diſtant reſemblance in their internal ſtructure with man; but that of birds is entirely diſſimilar. As they ſeem chiefly formed to inhabit the empty regions of air, all their parts are adapted to their deſtined ſituation. It will be proper therefore, before I give a general hiſtory of birds, to enter into a ſlight detail of their anatomy and conformation.

As to their external parts, they ſeem ſurpriſingly adapted for ſwiftneſs of motion. The ſhape of their body is ſharp before, to pierce and make way through the air; it then riſes by a gentle ſwelling to its bulk, and falls off in an expanſive tail, that helps to keep it buoyant, while

the fore-parts are cleaving the air by their ſharpneſs. From this conformation, they have often been compared to a ſhip making its way through water; the trunk of the body anſwers to the hold, the head to the prow, the tail to the rudder, and the wings to the oars; from whence the poets have adopted the metaphor of *remigium alarum*, when they deſcribe the wavy motion of a bird in flight.

What we are called upon next to admire in the external formation of birds is, the neat poſition of the feathers, lying all one way, anſwering at once the purpoſes of warmth, ſpeed, and ſecurity. They moſtly tend backward, and are laid over one another in an exact and regular order, armed with warm and ſoft down next the body, and more ſtrongly fortified and curiouſly cloſed externally, to fence off the injuries of the weather. But, leſt the feathers ſhould ſpoil by their violent attrition againſt the air, or imbibe the moiſture of the atmoſphere, the animal is furniſhed with a gland behind, containing a proper quantity of oil, which can be preſſed out by the bird's bill, and laid ſmoothly over every feather that wants to be dreſſed for the occaſion. This gland is ſituated on the rump, and furniſhed with an opening or excretory duct; about which grows a ſmall tuft of feathers, ſomewhat like a painter's pencil. When, therefore, the feathers are ſhattered or rumpled, the bird, turning

turning its head backwards, with the bill catches hold of the gland, and, preſſing it, forces out the oily ſubſtance, with which it anoints the disjoined parts of the feathers; and, drawing them out with great aſſiduity, re-compoſes and places them in due order; by which they unite more cloſely together. Such poultry, however, as live for the moſt part under cover, are not furniſhed with ſo large a ſtock of this fluid as thoſe birds that reſide in the open air. The feathers of an hen, for inſtance, are pervious to every ſhower; on the contrary, ſwans, geeſe, ducks, and all ſuch as Nature has directed to live upon the water, have their feathers dreſſed with oil from the very firſt day of their leaving the ſhell. Thus their ſtock of fluid is equal to the neceſſity of its conſumption. Their very fleſh contracts a flavour from it, which renders it in ſome ſo very rancid, as to make it utterly unfit for food; however, though it injures the fleſh, it improves the feathers for all the domeſtic purpoſes to which they are uſually converted.

Nor are the feathers with which birds are covered leſs an object of admiration. The ſhaft of every feather is made proportionably ſtrong; but hollow below for ſtrength and lightneſs, and above filled with a pith to feed the growth of the vane or beard that ſprings from the ſhaft of the feather on either ſide. All theſe feathers are placed generally according to their length and

ſtrength, ſo that the largeſt and ſtrongeſt feathers in flight have the greateſt ſhare of duty. The vane, or beard of the feather, is formed with equal contrivance and care. It conſiſts not of one continued membrane; becauſe, if this were broken, it could not eaſily be repaired; but it is compoſed of many layers, each ſomewhat in itſelf reſembling a feather, and lying againſt each other in cloſe conjunction. Towards the ſhaft of the feather, theſe layers are broad, and of a ſemicircular form, to ſerve for ſtrength, and for the cloſer grafting them one againſt another when in action. Towards the outer part of the vane, theſe layers grow ſlender and taper to be more light. On their under ſide they are thin and ſmooth, but their upper outer edge is parted into two hairy edges, each ſide having a different ſort of hairs, broad at bottom, and ſlender and bearded above. By this mechaniſm, the hooked beards of one layer always lie next the ſtraight beards of the next, and by that means lock and hold each other.

The next object that comes under conſideration in contemplating an animal that flies, is the wing, the inſtrument by which this wonderful progreſſion is performed. In ſuch birds as fly, they are uſually placed at that part of the body which ſerves to poize the whole, and ſupport it in a fluid that at firſt ſeems ſo much lighter than itſelf. They anſwer to the fore-legs in quadru-

quadrupedes, and at the extremity of this they have a certain finger-like appendix, which is uſually called the *baſtard-wing*. This inſtrument of flight is furniſhed with quills, which differ from the common feathers only in their ſize, being larger, and alſo from their ſpringing from the deeper part of the ſkin, their ſhafts lying almoſt cloſe to the bone. The beards of theſe quills are broad on one ſide and more narrow on the other, both which contribute to the progreſſive motion of the bird and the cloſeneſs of the wing. The manner in which moſt birds avail themſelves of theſe is firſt thus: they quit the earth with a bound, in order to have room for flapping with the wing; when they have room for this, they ſtrike the body of air beneath the wing with a violent motion, and with the whole under ſurface of the ſame; but then, to avoid ſtriking the air with equal violence on the upper ſide as they riſe, the wing is inſtantly contracted; ſo that the animal riſes by the impulſe till it ſpreads the wing for a ſecond blow. For this reaſon, we always ſee birds chuſe to riſe againſt the wind, becauſe they have thus a greater body of air on the under than the upper ſide of the wing. For theſe reaſons alſo large fowls do not riſe eaſily, both becauſe they have not ſufficient room at firſt for the motion of their wings, and becauſe the body of air does not lie ſo directly under the wing as they riſe.

In order to move the wings, all birds are furniſhed with two very ſtrong pectoral muſcles, which lie on each ſide of the breaſt-bone. The pectoral muſcles of quadrupedes are trifling in compariſon to thoſe of birds. In quadrupedes, as well as in man, the muſcles which move the thighs and hinder parts of the body are by far the ſtrongeſt, while thoſe of the arms are feeble; but in birds, which make uſe of their wings, the contrary obtains; the pectoral muſcles that move the wings or arms are of enormous ſtrength, while thoſe of the thighs are weak and ſlender. By means of theſe, a bird can move its wings with a degree of ſtrength which, when compared to the animal's ſize, is almoſt incredible. The flap of a ſwan's wing would break a man's leg; and a ſimilar blow from an eagle has been known to lay a man dead in an inſtant. Such, conſequently, is the force of the wing, and ſuch its lightneſs, as to be inimitable by art. No machines that human ſkill can contrive are capable of giving ſuch force to ſo light an apparatus. The art of flying, therefore, that has ſo often and ſo fruitleſsly been ſought after, muſt, it is feared, for ever be unattainable; ſince as man encreaſes the force of his flying machine, he muſt be obliged to encreaſe its weight alſo.

In all birds, except nocturnal ones, the head is ſmaller, and bears leſs proportion to the body than

than in quadrupedes, that it may more readily divide the air in flying, and make way for the body, ſo as to render its paſſage more eaſy. Their eyes alſo are more flat and depreſſed than in quadrupedes; a circle of ſmall plates of bone, placed ſcalewiſe, under the outer coat of the organ, encompaſſes the pupil on each, to ſtrengthen and defend it from injuries. Beſide this, birds have a kind of ſkin, called the nictitating membrane, with which, like a veil, they can at pleaſure cover their eyes, though their eyelids continue open. This membrane takes its riſe from the greater or more obtuſe corner of the eye, and ſerves to wipe, cleanſe, and probably to moiſten its ſurface. The eyes, though they outwardly appear but ſmall, yet, ſeparately, each almoſt equals the brain; whereas in man the brain is more than twenty times larger than the orbit of the eye. Nor is this organ in birds leſs adapted for viſion by a particular expanſion of the optic nerve, which renders the impreſſions of external objects more vivid and diſtinct.

From this conformation of the eye it follows, that the ſenſe of ſeeing in birds is infinitely ſuperior to that of other animals. Indeed, this piercing ſight ſeems neceſſary to the creature's ſupport and ſafety. Were this organ blunter, from the rapidity of the bird's motion, it would be apt to ſtrike againſt every object in its way;

and it could ſcarcely find ſubſiſtence unleſs poſſeſſed of a power to diſcern its food from above with aſtoniſhing ſagacity. An hawk, for inſtance, perceives a lark at a diſtance which neither men nor dogs could ſpy; a kite, from an almoſt imperceptible height in the clouds, darts down on its prey with the moſt unerring aim. The ſight of birds, therefore, exceeds what we know in moſt other animals, and excels them both in ſtrength and preciſion.

All birds want the external ear ſtanding out from the head; they are only furniſhed with holes that convey ſounds to the auditory canal. It is true, indeed, that the horned owl, and one or two more birds, ſeem to have external ears; but what bears that reſemblance are only feathers ſticking out on each ſide of the head, but no way neceſſary to the ſenſe of hearing. It is probable, however, that the feathers encompaſſing the ear-holes in birds ſupply the defect of the exterior ear, and collect ſounds to be tranſmitted to the internal ſenſory. The extreme delicacy of this organ is eaſily proved by the readineſs with which birds learn tunes, or repeat words, and the great exactneſs of their pronunciation.

The ſenſe of ſmelling ſeems not leſs vivid in the generality of birds. Many of them *wind* their prey at an immenſe diſtance, while others are equally protected by this ſenſe againſt their

inſidious purſuers. In decoys, where ducks are caught, the men who attend them univerſally keep a piece of turf burning near their mouths, upon which they breathe, leſt the fowl ſhould ſmell them, and conſequently fly away. The univerſality of this practice, puts the neceſſity of it beyond a doubt, and proves the extreme delicacy of the ſenſe of ſmelling, at leaſt in this ſpecies of the feathered creation.

Next to the parts for flight, let us view the legs and feet miniſtring to motion. They are both made light for the eaſier tranſportation through the air. The toes in ſome are webbed, to fit them for the waters; in others they are ſeparate, for the better holding objects, or clinging to trees for ſafety. Such as have long legs have alſo long necks, as otherwiſe they would be incapable of gathering up their food, either by land or water. But it does not hold, however, that thoſe who have long necks ſhould have long legs, ſince we ſee that ſwans and geeſe, whoſe necks are extremely long, have very ſhort legs, and theſe chiefly employed in ſwimming.

Thus every external part hitherto noticed appears adapted to the life and ſituation of the animal; nor are the inward parts, though leſs immediately appropriated to flight, leſs neceſſary to ſafety. The bones of every part

of the body are extremely light and thin; and all the muſcles, except that immediately moving the wings, extremely ſlight and feeble. The tail, which is compoſed of quill feathers, ſerves to counterbalance the head and neck, it guides the animal's flight like a rudder, and greatly aſſiſts it either in its aſcent or when deſcending.

If we go on to examine birds internally, we ſhall find the ſame wonderful conformation fitting them for a life in air, and encreaſing the ſurface by diminiſhing the ſolidity. In the firſt place, their lungs, which are commonly called the ſole, ſtick faſt to the ſides of the ribs and back, and can be very little dilated or contracted. But to make up for this, which might impede their breathing, the ends of the branches of the wind-pipe open into them, while theſe have openings into the cavity of the belly, and convey the air drawn in by breathing into certain receptacles like bladders, running along the length of the whole body. Nor are theſe openings obſcure, or difficult to be diſcerned; for a probe thruſt into the lungs of a fowl will eaſily find a paſſage into the belly; and air blown into the wind-pipe will be ſeen to diſtend the animal's body like a bladder. In quadrupedes this paſſage is ſtopped by the midriff; but in fowls the communication is obvious; and conſequently they have a much greater facility

cility of taking a long and large inſpiration. It is ſometimes alſo ſeen that the wind-pipe makes many convolutions within the body of the bird, and it is then called the labyrinth; but of what uſe theſe convolutions are, or why the wind-pipe ſhould make ſo many turnings within the body of ſome birds, is a difficulty for which no naturaliſt has been able to account.

This difference of the wind-pipe often obtains in animals that to all appearance are of the ſame ſpecies. Thus in the tame ſwan, the wind-pipe makes but a ſtraight paſſage into the lungs; while in the wild ſwan, which to all external appearance ſeems the ſame animal, the wind-pipe pierces through the breaſt-bone, and there has ſeveral turnings, before it comes out again and goes to enter the lungs. It is not to form the voice that theſe turnings are found, ſince the fowls that are without them are vocal; and thoſe, particularly the bird juſt now mentioned, that have them, are ſilent. Whence, therefore, ſome birds derive that loud and various modulation in their warblings is not eaſily to be accounted for; at leaſt, the knife of the anatomiſt goes but a ſhort way in the inveſtigation. All we are certain of, is, that birds have much louder voices, in reſpect to their bulk, than animals of any other kind; for the

the bellowing of an ox is not louder than the ſcream of a peacock.

In theſe particulars, birds pretty much reſemble each other in their internal conformation; but there are ſome varieties which we ſhould more attentively obſerve. All birds have, properly ſpeaking, but one ſtomach; but this is very different in different kinds. In all the rapacious kinds that live upon animal food, as well as in ſome of the fiſh-feeding tribe, the ſtomach is peculiarly formed. The œſophagus, or gullet, in them is found replete with glandulous bodies, which ſerve to dilate and macerate the food as it paſſes into the ſtomach, which is always very large in proportion to the ſize of the bird, and generally wrapped round with fat, in order to encreaſe its warmth and powers of digeſtion.

Granivorous birds, or ſuch as live upon fruits, corn, and other vegetables, have their inteſtines differently formed from thoſe of the rapacious kind. Their gullet dilates juſt above the breaſt-bone, and forms itſelf into a pouch or bag, called the crop. This is replete with ſalivary glands, which ſerve to moiſten and ſoften the grain and other food which it contains. Theſe glands are very numerous, with longitudinal openings, which emit a whitiſh and a viſcous ſubſtance. After the dry food of the bird has been macerated for a convenient time, it then paſſes

paſſes into the belly, where, inſtead of a ſoft moiſt ſtomach, as in the rapacious kinds, it is ground between two pair of muſcles, commonly called the gizzard, covered on the inſide with a ſtony ridgy coat, and almoſt cartilaginous. Theſe coats rubbing againſt each other, are capable of bruiſing and attenuating the hardeſt ſubſtances, their action being often compared to that of the grinding-teeth in man and other animals. Thus the organs of digeſtion are in a manner reverſed in birds. Beaſts grind their food with their teeth, and then it paſſes into the ſtomach, where it is ſoftened and digeſted. On the contrary, birds of this ſort firſt macerate and ſoften it in the crop, and then it is ground and comminuted in the ſtomach or gizzard. Birds are alſo careful to pick up ſand, gravel, and other hard ſubſtances, not to grind their food, as has been ſuppoſed, but to prevent the too violent action of the coats of the ſtomach againſt each other.

Moſt birds have two appendices or blind guts, which in quadrupedes are always found ſingle. Among ſuch birds as are thus ſupplied, all carnivorous fowl, and all birds of the ſparrow kind, have very ſmall and ſhort ones: water-fowl, and birds of the poultry kind, the longeſt of all. There is ſtill another appendix obſervable in the inteſtines of birds, reſembling a little worm, which is nothing more than the remainder

remainder of that paſſage by which the yolk was conveyed into the guts of the young chicken while yet in the egg and under incubation.

The outlet of that duct which conveys the bile into the inteſtines is, in moſt birds, a great way diſtant from the ſtomach; which may ariſe from the danger there would be of the bile regurgitating into the ſtomach in their various rapid motions, as we ſee in men at ſea; wherefore their biliary duct is ſo contrived, that this regurgitation cannot take place.

All birds, though they want a bladder for urine, have large kidneys and ureters, by which this ſecretion is made, and carried away by one common canal. "Birds," ſays Harvey, "as "well as ſerpents, which have ſpongy lungs, "make but little water, becauſe they drink but "little. They, therefore, have no need of a "bladder; but their urine diſtills down into the "common canal, deſigned for receiving the "other excrements of the body. The urine of "birds differs from that of other animals; for "as there is uſually in urine two parts, one "more ſerous and liquid, the other more thick "and groſs, which ſubſides to the bottom; in "birds, this part is moſt abundant, and is diſ-"tinguiſhed from the reſt by its white or ſilver "colour. This part is found not only in the "whole inteſtinal canal, but is ſeen alſo in the "whole

" whole channel of the ureters, which may be " diſtinguiſhed from the coats of the kidneys " by their whiteneſs. This milky ſubſtance " they have in greater plenty than the more thin " and ſerous part; and it is of a middle conſiſt- " ence, between limpid urine and the groſſer " parts of the fæces. In paſſing through the " ureters, it reſembles milk curdled or lightly " condenſed; and, being caſt forth eaſily, con- " geals into a chalky cruſt."

From this ſimple conformation of the animal, it ſhould ſeem that birds are ſubject to few diſeaſes; and, in fact, they have but few. There is one, however, which they are ſubject to, from which quadrupedes are in a great meaſure exempt: this is the annual molting which they ſuffer; for all birds whatſoever obtain a new covering of feathers once a year, and caſt the old. During the molting ſeaſon, they ever appear diſordered; thoſe moſt remarkable for their courage then loſe all their fierceneſs; and ſuch as are of a weakly conſtitution often expire under this natural operation. No feeding can maintain their ſtrength; they all ceaſe to breed at this ſeaſon; that nouriſhment which goes to the production of the young is wholly abſorbed by the demand required for ſupplying the naſcent plumage.

This molting time, however, may be artificially accelerated; and thoſe who have the management

management of ſinging birds frequently put their ſecret in practice. They incloſe the bird in a dark cage, where they keep it exceſſively warm, and throw the poor little animal into an artificial fever; this produces the molt; his old feathers fall before their time, and a new ſet take place, more brilliant and beautiful than the former. They add, that it mends the bird's ſinging, and encreaſes its vivacity; but it muſt not be concealed, that ſcarce one bird in three ſurvives the operation.

The manner in which Nature performs this operation of molting is thus: the quill or feather, when firſt protruded from the ſkin and come to its full ſize, grows harder as it grows older, and receives a kind of perioſteum or ſkin round the ſhaft, by which it ſeems attached to the animal. In proportion as the quill grows older, its ſides, or the bony pen part, thicken; but its whole diameter ſhrinks and decreaſes. Thus, by the thickening of its ſides, all nouriſhment from the body becomes more ſparing; and, by the decreaſe of its diameter, it becomes more looſely fixed in its ſocket, till at length it falls out. In the mean time, the rudiments of an incipient quill are beginning below. The ſkin forms itſelf into a little bag, which is fed from the body by a ſmall vein and artery, and which every day encreaſes in ſize till it is protruded. While the one end vegetates into the

beard

beard or vane of the feather, that part attached to the ſkin is ſtill ſoft, and receives a conſtant ſupply of nouriſhment, which is diffuſed through the body of the quill by that little light ſubſtance which we always find within when we make a pen. This ſubſtance, which as yet has received no name that I know of, ſerves the growing quill as the umbilical artery does an infant in the womb, by ſupplying it with nouriſhment, and diffuſing that nouriſhment over the whole frame. When, however, the quill is come to its full growth, and requires no further nouriſhment, the vein and artery become leſs and leſs, till at laſt the little opening by which they communicated with the quill becomes wholly obliterated; and the quill thus deprived continues in its ſocket for ſome months, till in the end it ſhrinks, and leaves room for a repetition of the ſame proceſs of nature as before.

The molting ſeaſon commonly obtains from the end of ſummer to the middle of autumn. The bird continues to ſtruggle with this malady during the winter, and Nature has kindly provided, that when there are the feweſt proviſions, that then the animal's appetite ſhall be leaſt craving. At the beginning of ſpring, when food begins again to be plenty, the animal's ſtrength and vigour return. It is then that the abundance of proviſions, aided by the mildneſs of the ſeaſon, incite it to love, and all

all nature ſeems teeming with life, and diſpoſed to continue it.

CHAP. II.

Of the Generation, Neſtling, and Incubation of Birds.

THE return of ſpring is the beginning of pleaſure. Thoſe vital ſpirits which ſeemed locked up during the winter, then begin to expand; vegetables and inſects ſupply abundance of food; and the bird having more than a ſufficiency for its own ſubſiſtence, is impelled to transfuſe life as well as to maintain it. Thoſe warblings which had been huſhed during the colder ſeaſons, now begin to animate the fields; every grove and buſh reſounds with the challenge of anger, or the call of allurement. This delightful concert of the grove, which is ſo much admired by man, is no way ſtudied for his amuſement: it is uſually the call of the male to the female; his efforts to ſooth her during the times of incubation: or it is a challenge between two males, for the affections of ſome common favourite.

It is by this call that birds begin to pair at the approach of ſpring, and provide for the ſupport of a future progeny. The loudeſt notes are uſually from the male; while the hen ſeldom expreſſes

expreſſes her conſent, but in a ſhort, interrupted twittering. This compact, at leaſt for the ſeaſon, holds with unbroken faith: many birds live with inviolable fidelity together for a conſtancy; and when one dies, the other is always ſeen to ſhare the ſame fate ſoon after. We muſt not take our idea of the conjugal fidelity of birds from obſerving the poultry in our yards, whoſe freedom is abridged, and whoſe manners are totally corrupted by ſlavery. We muſt look for it in our fields and our foreſts, where Nature continues in unadulterated ſimplicity; where the number of males is generally equal to that of females; and where every little animal ſeems prouder of his progeny than pleaſed with his mate. Were it poſſible to compare ſenſations, the male of all wild birds ſeems as happy in the young brood as the female; and all his former careſſes, all his ſoothing melodies, ſeem only aimed at that important occaſion when they are both to become parents, and to educate a progeny of their own producing. The pleaſures of love appear dull in their effects, when compared to the interval immediately after the excluſion of their young. They both ſeem, at that ſeaſon, tranſported with pleaſure; every action teſtifies their pride, their importance, and tender ſolicitude.

When the buſineſs of fecundation is performed, the female then begins to lay. Such eggs as have

have been impregnated by the cock are prolific; and ſuch as have not (for ſhe lays often without any congreſs whatſoever) continue barren, and are only addled by incubation. Previous, however, to laying, the work of neſtling becomes the common care; and this is performed with no ſmall degree of aſſiduity and apparent deſign. It has been aſſerted, that birds of one kind always make their neſts in the ſame manner, and of the ſame materials; but the truth is, that they vary this as the materials, places, or climates happen to differ. The redbreaſt, in ſome parts of England, makes its neſt with oak leaves, where they are in greateſt plenty; in other parts with moſs and hair. Some birds, that with us make a very warm neſt, are leſs ſolicitous in the tropical climates, where the heat of the weather promotes the buſineſs of incubation. In general, however, every ſpecies of birds has a peculiar architecture of its own; and this adapted to the number of eggs, the temperature of the climate, or the reſpective heat of the little animal's own body. Where the eggs are numerous, it is then incumbent to make the neſt warm, that the animal heat may be equally diffuſed to them all. Thus the wren, and all the ſmall birds, make the neſt very warm; for having many eggs, it is requiſite to diſtribute warmth to them in common: on the contrary, the plover, that has but two eggs, the

the eagle, and the crow, are not ſo ſolicitous in this reſpect, as their bodies are capable of being applied to the ſmall number upon which they ſit. With regard to climate, water-fowl, that with us make but a very ſlovenly neſt, are much more exact in this particular, in the colder regions of the north. They there take every precaution to make it warm; and ſome kinds ſtrip the down from their breaſts, to line it with greater ſecurity.

In general, however, every bird reſorts to hatch in thoſe climates and places where its food is found in greateſt plenty; and always at that ſeaſon when proviſions are in the greateſt abundance. The large birds, and thoſe of the aquatic kinds, chuſe places as remote from man as poſſible, as their food is in general different from that which is cultivated by human labour. Some birds, which have only the ſerpent to fear, build their neſts depending from the end of a ſmall bough, and form the entrance from below; being thus ſecured either from the ſerpent or the monkey tribes. But all the little birds which live upon fruits and corn, and that are too often unwelcome intruders upon the fruits of human induſtry, in making their neſts uſe every precaution to conceal them from man. On the other hand, the great birds, remote from human ſociety, uſe every precaution to render theirs inacceſſible to wild beaſts or vermin.

Nothing can exceed the patience of birds while hatching; neither the calls of hunger, nor the near approach of danger, can drive them from the neſt. They are often fat upon beginning to ſit, yet before incubation is over, the female is uſually waſted to ſkin and bone. Ravens and crows, while the females are ſitting, take care to provide them with food; and this in great abundance. But it is different with moſt of the ſmaller kinds: during the whole time the male ſits near his mate upon ſome tree, and ſooths her by his ſinging; and often when ſhe is tired takes her place, and patiently continues upon the neſt till ſhe returns. Sometimes, however, the eggs acquire a degree of heat too much for purpoſes of hatching: in ſuch caſes, the hen leaves them to cool a little; and then returns to ſit, with her uſual perſeverance and pleaſure.

So great is the power of inſtinct, in animals of this claſs, that they ſeem driven from one appetite to another, and continue almoſt paſſive under its influence. Reaſon we cannot call it, ſince the firſt dictates of that principle would be ſelf-preſervation: "Take a brute," ſays Addiſon, "out of his inſtinct, and you find him "wholly deprived of underſtanding. With what "caution," continues he, "does the hen pro-"vide herſelf a neſt in places unfrequented, and "free from noiſe and diſturbance! When ſhe

" has laid her eggs in ſuch a manner that ſhe
" can cover them, what care does ſhe take in
" turning them frequently, that all parts may
" partake of the vital warmth! When ſhe leaves
" them, to provide for her neceſſary ſuſtenance,
" how punctually does ſhe return before they
" have time to cool, and become incapable of
" producing an animal! In the ſummer you ſee
" her giving herſelf greater freedoms, and quit-
" ting her care for above two hours together:
" but in winter, when the rigour of the ſeaſon
" would chill the principles of life, and deſtroy
" the young one, ſhe grows more aſſiduous in
" her attendance, and ſtays away but half the
" time. When the birth approaches, with how
" much nicety and attention does ſhe help the
" chick to break the priſon! not to take notice
" of her covering it from the injuries of the
" weather, providing it with proper nouriſh-
" ment, and teaching it to help itſelf; nor to
" mention her forſaking the neſt, if, after the
" uſual time of reckoning, the young one does
" not make its appearance. A chymical opera-
" tion could not be followed with greater art or
" diligence than is ſeen in the hatching a chick,
" though there are many birds that ſhew an in-
" finitely greater ſagacity: yet at the ſame time
" the hen, that has all this ſeeming ingenuity,
" (which is indeed abſolutely neceſſary for the
" propagation of the ſpecies) conſidered in other

"reſpects, is without the leaſt glimmerings of "thought or common ſenſe: ſhe miſtakes a piece "of chalk for an egg, and ſits upon it in the "ſame manner; ſhe is inſenſible of any encreaſe "or diminution in the number of thoſe ſhe lays; "ſhe does not diſtinguiſh between her own and "thoſe of another ſpecies; and when the birth "appears of never ſo different a bird, will cheriſh "it for her own. An hen followed by a brood "of ducks, ſhall ſtand affrighted at the edge "of the pond, trembling for the fate of her "young, which ſhe ſees venturing into ſo dan-"gerous an element. As the different principle "which acts in theſe different animals cannot be "termed reaſon, ſo when we call it inſtinct, we "mean ſomething we have no knowledge of. It "appears to me the immediate direction of Pro-"vidence; and ſuch an operation of the Su-"preme Being as that which determines all the "portions of matter to their proper centres."

The production of the young, as was ſaid, ſeems to be the great æra of a bird's happineſs. Nothing can at that time exceed its ſpirit and induſtry: the moſt timid becomes courageous in the defence of its young. Birds of the rapacious kind, at this ſeaſon, become more than uſually fierce and active. They carry their prey, yet throbbing with life, to the neſt, and early accuſtom their young to habits of ſlaughter and cruelty. Nor are thoſe of milder natures leſs

buſily

buſily employed; the little birds then diſcontinue their ſinging, taken up with more important purſuits of common ſubſiſtence.

While the young are yet unfledged, and continue in the neſt, the old ones take care to provide them with a regular ſupply; and, leſt one ſhould take all nouriſhment from the reſt, they feed each of the young in their turn. If they perceive that man has been buſy with their neſt, or has handled the little ones, they abandon the place by night, and provide their brood a more ſecure, though leſs commodious retreat. When the whole family is fully plumed, and capable of avoiding danger by flight, they are then led forth when the weather is fine, and taught the paternal art of providing for their ſubſiſtence. They are led to the places where their food lies; they are ſhewn the method of diſcovering or carrying it away; and then led back to the neſt, for a day or two longer. At length, when they are completely qualified to ſhift for themſelves, the old ones take them abroad, and leading them to the accuſtomed places, forſake them for the laſt time; and all future connexion is ever at an end.

Thoſe birds which are hatched and ſent out earlieſt in the ſeaſon are the moſt ſtrong and vigorous; thoſe, on the other hand, that have been delayed till the midſt of ſummer, are more feeble and tender, and ſometimes incapable of

ſuſtaining the rigours of the enſuing winter. Birds themſelves ſeem ſenſible of this difference, and endeavour to produce early in the ſpring. If, however, their efforts are obſtructed by having their neſts robbed, or ſome ſimilar accident, they ſtill perſevere in their efforts for a progeny; and it often happens that ſome are thus retarded till the midſt of winter. What number of eggs any bird can lay in the courſe of a ſeaſon is not aſcertained; but this is true, that ſuch as would have laid but two or three at the moſt, if their neſts be robbed, or their eggs ſtolen, will lay above ten or twelve. A common hen, if moderately fed, will lay above an hundred from the beginning of ſpring to the latter end of autumn. In general, however, it obtains, that the ſmalleſt and weakeſt animals are the moſt prolific, while the ſtrong and rapacious are abridged by ſterility. Thus, ſuch kinds as are eaſily deſtroyed, are as readily repaired; and Nature, where ſhe has denied the power of reſiſtance, has compenſated by the fertility attending procreation.

Birds in general, though they have ſo much to fear from man and each other, are ſeldom ſcared away from their uſual haunts. Although they be ſo perfectly formed for a wandering life, and are ſupplied with powers to ſatisfy all their appetites, though never ſo remote from the object, though they are ſo well fitted for changing

place

place with eaſe and rapidity, yet the greateſt number remain contented in the diſtricts where they have been bred, and by no means exert their deſires in proportion to their endowments. The rook, if undiſturbed, never deſires to leave his native grove; the black-bird ſtill frequents its accuſtomed hedge; and the red-breaſt, though ſeemingly mild, claims a certain diſtrict, from whence he ſeldom moves, but drives out every one of the ſame ſpecies from thence without pity. They are excited to migration by no other motives but thoſe of fear, climate, or hunger. It muſt be from one of theſe powerful motives that the birds, which are called birds of paſſage, every year forſake us for ſome time, and make their regular and expected returns.

Nothing has more employed the curioſity of mankind than theſe annual emigrations; and yet few ſubjects continue ſo much involved in darkneſs. It is generally believed, that the cauſe of their retreat from theſe parts of Europe is either a ſcarcity of food at certain ſeaſons, or the want of a ſecure aſylum from the perſecution of man during the time of courtſhip and bringing up their young. Thus the ſtarling, in Sweden, at the approach of winter, finding ſubſiſtence no longer in that kingdom, deſcends every year into Germany; and the hen chaffinches of the ſame country are ſeen every year to fly through Holland in large flocks, to paſs

their winter in a milder climate. Others, with a more daring ſpirit, prepare for journies that might intimidate even human perſeverance. Thus the quails in ſpring forſake the burning heats of Africa for the milder ſun of Europe; and, when they have paſſed the ſummer with us, ſteer their flight back to enjoy in Egypt the temperate air, which then begins to be delightful. This with them ſeems a preconcerted undertaking. They unite together in ſome open place, for ſome days before their departure, and, by an odd kind of chattering, ſeem to debate on the method to proceed. When their plan is reſolved upon, they all take flight together, and often appear in ſuch numbers, that, to mariners at ſea, they ſeem like a cloud that reſts upon the horizon. The boldeſt, ſtrongeſt, and by far the greateſt number, make good their intention; but many there are who, not well apprized of their own force for the undertaking, grow weary in the way, and, quite ſpent by the fatigues of their flight, drop down into the ſea, and ſometimes upon deck, thus becoming an eaſy prey to the mariner.

Of the vaſt quantity of water-fowl that frequent our ſhores, it is amazing to reflect how few are known to breed here. The cauſe that principally urges them to leave this country ſeems to be not merely the want of food, but the deſire of a ſecure retreat. Our country is

too

too populous for birds ſo ſhy and timid as the greateſt number of theſe are. When great part of our iſland was a mere waſte, an uncultivated tract of woods and marſhes, many ſpecies of birds which now migrate remained with us throughout the year. The great heron and the crane, that have now forſaken this country, in former times bred familiarly in our marſhes, and ſeemed to animate our fens. Their neſts, like thoſe of moſt cloven-footed water-fowl, were built on the ground, and expoſed to every invader. But as rural œconomy encreaſed, theſe animals were more and more diſturbed. Before they had little to fear, as the ſurrounding marſh defended them from all the carnivorous quadrupedes, and their own ſtrength from birds of prey; but upon the intruſion of man, and by a long ſeries of alarms, they have at length been obliged to ſeek, during the ſummer, ſome lonely habitation, at a ſafe diſtance from every deſtroyer.

Of the numerous tribes of the duck kind, we know of no more than five that breed here; the tame ſwan, the tame gooſe, the ſheldrake, the eider duck, and a few of the wild ducks. The reſt contribute to form that amazing multitude of water-fowl which annually repair to the dreary lakes and deſerts of Lapland from the more ſouthern countries of Europe. In thoſe extenſive and ſolitary retreats, they perform the

duties of incubation and nutrition in full ſecurity. There are few of this kind that may not be traced to the northern deſerts, to countries of lakes, rivers, ſwamps, and mountains, covered with thick and gloomy foreſts, that afford ſhelter during ſummer to the timid animals, who live there in undiſturbed ſecurity. In thoſe regions, from the thickneſs of the foreſts, the ground remains moiſt and penetrable during the ſummer ſeaſon; the woodcock, the ſnipe, and other ſlender-billed birds, can there feed at eaſe; while the web-footed birds find more than ſufficient plenty of food from the number of inſects, which ſwarm there to an incredible degree. The days there are long; and the beautiful meteorous nights afford them every opportunity of collecting ſo minute a food, which is probably of all others the moſt grateful. We are not to be aſtoniſhed, therefore, at the amazing numbers of fowl that deſcend from theſe regions at the approach of winter; numbers to which the army of Xerxes was but trifling in compariſon; and which Linnæus has obſerved for eight whole days and nights to cover the ſurface of the river Calix.

This migration from the north uſually begins in September, when they quit their retreats, and diſperſe themſelves over all the ſouthern parts of Europe. It is not unpleaſing to obſerve the order of their flight; they generally range themſelves

themſelves in a long line, or they ſometimes make their march angularly, two lines uniting in the center like the letter V reverſed. The bird which leads at the point ſeems to cleave the air, to facilitate the paſſage for thoſe which are to follow. When fatigued with this laborious ſtation, it falls back into one of the wings of the file, while another takes its place. With us they make their appearance about the beginning of October, circulate firſt round our ſhores, and, when compelled by ſevere froſt, betake themſelves to our lakes and rivers. Some, indeed, of the web-footed fowl, of hardier conſtitutions than the reſt, abide the rigours of their northern climate the whole winter; but when the cold reigns there with more than uſual ſeverity, they are obliged to ſeek for more ſouthern ſkies. They then repair with the reſt for ſhelter to theſe kingdoms; ſo that the diver, the wild ſwan, and the ſwallow-tailed ſheldrake, viſit our coaſts but ſeldom, and that only when compelled by the ſeverity of their winters at home.

It has been often a ſubject of aſtoniſhment, how animals to all appearance ſo dull and irrational ſhould perform ſuch long journeys, ſhould know whither to ſteer, and when to ſet out upon ſuch a great undertaking. It is probable that the ſame inſtinct which governs all their other actions operates alſo here. They rather follow the weather than the country; they ſteer only

from colder or warmer climates into thoſe of an oppoſite nature; and finding the variations of the air as they proceed in their favour, go on till they find land to repoſe on. It cannot be ſuppoſed that they have any memory of the country where they might have ſpent a former winter: it cannot be ſuppoſed that they ſee the country to which they travel, from their height in the air; ſince, though they mounted for miles, the convexity of the globe would intercept their view; it muſt therefore only be, that they go on as they continue to perceive the atmoſphere more ſuitable to their preſent wants and diſpoſitions.

All this ſeems to be pretty plain; but there is a cirumſtance attending the migration of ſwallows which wraps this ſubject in great obſcurity. It is agreed on all hands, that they are ſeen migrating into warmer climates, and that in amazing numbers, at the approach of the European winter. Their return into Europe is alſo as well atteſted about the beginning of ſummer; but we have another account, which ſerves to prove that numbers of them continue torpid here during the winter; and, like bats, make their retreat into old walls, the hollow of trees, or even ſink into the deepeſt lakes, and find ſecurity for the winter ſeaſon, by remaining there in cluſters at the bottom. However this latter circumſtance may be, their retreat into old walls is too well authenticated

authenticated to remain a doubt at preſent. The difficulty, therefore, is to account for this difference in theſe animals thus variouſly preparing to encounter the winter. It was ſuppoſed that in ſome of them the blood might loſe its motion by the cold, and that thus they were rendered torpid by the ſeverity of the ſeaſon; but Mr. Buffon having placed many of this tribe in an ice-houſe, found that the ſame cold by which their blood was congealed was fatal to the animal; it remains, therefore, a doubt to this hour whether there may not be a ſpecies of ſwallows, to all external appearance like the reſt, but differently formed within, ſo as to fit them for a ſtate of inſenſibility during the winter here. It was ſuggeſted, indeed, that the ſwallows found thus torpid were ſuch only as were too weak to undertake the migration, or were hatched too late to join the general convoy; but it was upon theſe that Mr. Buffon tried his experiment; it was theſe that died under the operation.

Thus there are ſome birds which by migrating make an habitation of every part of the earth; but in general every climate has birds peculiar to itſelf. The feathered inhabitants of the temperate zone are but little remarkable for the beauty of their plumage; but then the ſmaller kinds make up for this defect by the melody of their voices. The birds of the torrid zone are very bright and vivid in their colours; but they

have ſcreaming voices, or are totally ſilent, The frigid zone, on the other hand, where the ſeas abound with fiſh, are ſtocked with birds of the aquatic kind, in much greater plenty than in Europe; and theſe are generally cloathed with a warmer coat of feathers; or they have large quantities of fat lying underneath the ſkin, which ſerves to defend them from the rigours of the climate.

In all countries, however, birds are a more long-lived claſs of animals than the quadrupedes or inſects of the ſame climate. The life of man himſelf is but ſhort, when compared to what ſome of them enjoy. It is ſaid that ſwans have been known to live three hundred years: geeſe are often ſeen to live fourſcore, while linnets, and other little birds, though impriſoned in cages, are often found to reach fourteen or fifteen. How birds, whoſe age of perfection is much more early than that of quadrupedes, ſhould yet live comparatively ſo much longer, is not eaſily to be accounted for; perhaps, as their bones are lighter, and more porous than thoſe of quadrupedes, there are fewer obſtructions in the animal machine; and Nature, thus finding more room for the operations of life, it is carried on to a greater extent.

All birds in general are leſs than quadrupedes; that is, the greateſt of one claſs far ſurpaſs the greateſt of the other in magnitude. The oſtrich,

trich, which is the greateſt of birds, bears no proportion to the elephant; and the ſmalleſt humming-bird, which is the leaſt of the claſs, is ſtill far more minute than the mouſe. In theſe the extremities of Nature are plainly diſcernible; and in forming them ſhe appears to have been doubtful in her operations; the oſtrich, ſeemingly covered with hair, and incapable of flight, making near approaches to the quadrupede claſs; while the humming-bird, of the ſize of an humble-bee, and with a fluttering motion, ſeems nearly allied to the inſect.

Theſe extremities of this claſs are rather objects of human curioſity than utility: it is the middle order of birds which man has taken care to propagate and maintain. Of thoſe which he has taken under his protection, and which adminiſter to his pleaſures or neceſſities, the greateſt number ſeem creatures of his formation. The variety of climate to which he conſigns them, the food with which he ſupplies them, and the purpoſes for which he employs them, produce amazing varieties, both in their colours, ſhape, magnitude, and the taſte of their fleſh. Wild birds are, for the moſt part, of the ſame magnitude and ſhape; they ſtill keep the prints of primæval nature ſtrong upon them; except in a few they generally maintain their very colour: but it is otherwiſe with domeſtic animals; they change at the will of man—of the tame pigeon,

for

for inſtance, it is ſaid that they can be bred to a feather.

As we are thus capable of influencing their form and colour, ſo alſo is it frequent to ſee equal inſtances of our influencing their habitudes, appetites and paſſions. The cock, for inſtance, is artificially formed into that courage and activity which he is ſeen to poſſeſs; and many birds teſtify a ſtrong attachment to the hand that feeds them: how far they are capable of inſtruction, is manifeſt to thoſe who have the care of hawks. But a ſtill more ſurpriſing inſtance of this, was ſeen ſome time ago in London: a canary bird was taught to pick up the letters of the alphabet, at the word of command, ſo as to ſpell any perſon's name in company; and this the little animal did by motions from its maſter, which were imperceptible to every other ſpectator. Upon the whole, however, they are inferior to quadrupedes in docility; and ſeem more mechanically impelled by all the power of inſtinct.

CHAP.

CHAP. III.

Of the Diviſion of Birds.

THOUGH birds are fitted for ſporting in air, yet as they find their food upon the ſurface of the earth, there ſeems a variety equal to the different aliments with which it tends to ſupply them. The flat and burning deſert, the rocky cliff, the extenſive fen, the ſtormy ocean, as well as the pleaſing landſcape, have all their peculiar inhabitants. The moſt obvious diſtinction therefore of birds, is into thoſe that live by land, and thoſe that live by water; or, in other words, into *land birds*, and *water fowl*.

It is no difficult matter to diſtinguiſh land from water fowl, by the legs and toes. All land birds have their toes divided, without any membrane or web between them; and their legs and feet ſerve them for the purpoſes of running, graſping, or climbing. On the other hand, water fowl have their legs and feet formed for the purpoſes of wading in water, or ſwimming on its ſurface. In thoſe that wade, the legs are uſually long and naked; in thoſe that ſwim, the toes are webbed together, as we ſee in the feet of a gooſe, which ſerve, like oars, to drive them forward with greater velocity. The formation,

mation, therefore, of land and water fowl, is as diſtinct as their habits; and Nature herſelf ſeems to offer us this obvious diſtribution, in methodizing animals of the feathered creation.

However, a diſtinction ſo comprehenſive goes but a ſhort way in illuſtrating the different tribes of ſo numerous a claſs. The number of birds already known, amounts to above eight hundred; and every perſon who turns his mind to theſe kinds of purſuits, is every day adding to the catalogue. It is not enough, therefore, to be able to diſtinguiſh a land from a water fowl; much more is ſtill required: to be able to diſtinguiſh the different kinds of birds from each, other; and even the varieties in the ſame kind, when they happen to offer. This certainly is a work of great difficulty; and perhaps the attainment will not repay the labour. The ſenſible part of mankind will not withdraw all their attention from more important purſuits, to give it entirely up to what promiſes to repay them only with a very confined ſpecies of amuſement. In my diſtribution of birds, therefore, I will follow Linnæus in the firſt ſketch of his ſyſtem; and then leave him, to follow the moſt natural diſtinctions, in enumerating the different kinds that admit of an hiſtory, or require a deſcription.

Linnæus

Linnæus divides all birds into ſix claſſes: namely, into birds of the *rapacious kind*, birds of the *pie kind*, birds of the *poultry kind*, birds of the *ſparrow kind*, birds of the *duck kind*, and birds of the *crane kind*. The four firſt comprehend the various kinds of land birds; the two laſt, thoſe that belong to the water.

Birds of the *rapacious kind* conſtitute that claſs of carnivorous fowl that live by rapine. He diſtinguiſhes them by their beak, which is hooked, ſtrong, and notched at the point; by their legs, which are ſhort and muſcular, and made for the purpoſes of tearing; by their toes, which are ſtrong and knobbed; and their talons, which are ſharp and crooked; by the make of their body, which is muſcular; and their fleſh, which is impure: nor are they leſs known by their food, which conſiſts entirely of fleſh; their ſtomach, which is membranous; and their manners, which are fierce and cruel.

Birds of the *pie kind* have the bill differing from the former: as in thoſe it reſembled an hook, deſtined for tearing to pieces; in theſe it reſembles a wedge, fitted for the purpoſe of cleaving. Their legs are formed ſhort and ſtrong for walking; their body is ſlender and impure, and their food miſcellaneous. They neſtle in trees, and the male feeds the female during the time of incubation.

Birds

Birds of the *poultry kind* have the bill a little convex, for the purpoſes of gathering their food. The upper chap hangs over the lower; their bodies are fat and muſcular, and their fleſh white and pure. They live upon grain, which is moiſtened in the crop. They make their neſt on the ground, without art; they lay many eggs, and uſe promiſcuous venery.

Birds of the *ſparrow kind* comprehend all that beautiful and vocal claſs that adorn our fields and groves, and gratify every ſenſe in its turn. Their bills may be compared to a forceps that catches hold: their legs are formed for hopping along; their bodies are tender; pure in ſuch as feed upon grain, impure in ſuch as live upon inſects. They live chiefly in trees; their neſts are artificially made, and their amours are obſerved with connubial fidelity.

Birds of the *duck kind* uſe their bill as a kind of ſtrainer to their food; it is ſmooth, covered with a ſkin, and nervous at the point. Their legs are ſhort, and their feet formed for ſwimming, the toes being webbed together. Their body is fat, inclining to rancidity. They live in waters, and chiefly build their neſts upon land.

With reſpect to the order of birds that belong to the waters, thoſe of the *crane kind* have the bill formed for the purpoſes of ſearching and examining

examining the bottom of pools: their legs are long, and formed for wading; their toes are not webbed; their thighs are half naked; their body is ſlender, and covered with a very thin ſkin; their tail is ſhort, and their fleſh ſavoury. They live in lakes upon animals, and they chiefly build their neſts upon the ground.

Such is the diviſion of Linnæus, with reſpect to this claſs of animals; and at firſt ſight it appears natural and comprehenſive. But we muſt not be deceived by appearances: the ſtudent, who ſhould imagine he was making a progreſs in the hiſtory of Nature, while he was only thus making arbitrary diſtributions, would be very much miſtaken. Should he come to enter deeper into this naturaliſt's plan, he would find birds the moſt unlike in nature thrown together into the ſame claſs; and find animals joined, that entirely differ in climate, in habitudes, in manners, in ſhape, colouring and ſize. In ſuch a diſtribution, for inſtance, he would find the humming-bird and the raven, the rail and the oſtrich, joined in the ſame family. If when he aſked what ſort of a creature was the humming-bird, he were told that it was in the ſame claſs with the carrion crow, would he not think himſelf impoſed upon? In ſuch a caſe, the only way to form any idea of the animal whoſe hiſtory he deſires to know, is to ſee it; and that curioſity very

very few have an opportunity of gratifying. The number of birds is ſo great, that it might exhauſt the patience not only of the writer, but the reader, to examine them all: in the preſent confined undertaking it would certainly be impoſſible. I will therefore now attach myſelf to a more natural method: and, ſtill keeping the general diviſion of Linnæus before me, enter into ſome deſcription of the moſt noted, or the moſt worth knowing.

Under one or other claſs, as I ſhall treat them, the reader will probably find all the ſpecies, and all the varieties that demand his curioſity. When the leader of any tribe is deſcribed, and its hiſtory known, it will give a very tolerable idea of all the ſpecies contained under it. It is true, the reader will not thus have his knowledge ranged under ſuch preciſe diſtinctions; nor can he be able to ſay, with ſuch fluency, that the rail is of the oſtrich claſs: but, what is much more material, he will have a tolerable hiſtory of the bird he deſires to know, or at leaſt of that which moſt reſembles it in nature.

However, it may be proper to apprize the reader that he will not here find his curioſity ſatisfied, as in ſome of the former volumes, where we often took Mr. Buffon for our guide. Thoſe who have hitherto written the natural hiſtory of birds, have in general been contented with

The Ostrich.

with telling their names, or describing their toes or their plumage. It must often therefore happen, that instead of giving the history of a bird, we must be content to entertain the reader with merely its description. I will therefore divide the following history of birds, with Linnæus, into six parts: in the first of which I will give such as Brisson has ranged among the rapacious birds; next those of the pie kind; and thus go on through the succeeding classes, till I finish with those of the duck kind. But before I enter upon a systematic detail, I will beg leave to give the history of three or four birds, that do not well range in any system. These, from their great size, are sufficiently distinguishable from the rest; and from their incapacity of flying, lead a life a good deal differing from the rest of the feathered creation. The birds I mean are the Ostrich, the Cassowary, the Emu, the Dodo, and the Solitaire.

CHAP. IV.

The Ostrich.

IN beginning with the feathered tribe, the first animal that offers seems to unite the class of quadrupedes and of birds in itself. While it has the general outline and properties of a bird, yet it retains many of the marks of the quadrupede.

quadrupede. In appearance the oſtrich reſembles the camel, and is almoſt as tall; it is covered with a plumage that reſembles hair much more nearly than feathers, and its internal parts bear as near a ſimilitude to thoſe of the quadrupede as of the bird creation. It may be conſidered, therefore, as an animal made to fill up that chaſm in nature which ſeparates one claſs of beings from another.

The oſtrich is the largeſt of all birds. Travellers affirm that they are ſeen as tall as a man on horſeback; and even ſome of thoſe that have been brought into England were above ſeven feet high. The head and bill ſomewhat reſemble thoſe of a duck; and the neck may be likened to that of a ſwan, but that it is much longer; the legs and thighs reſemble thoſe of an hen; though the whole appearance bears a ſtrong reſemblance to that of a camel. But to be more particular; it is uſually ſeven feet high from the top of the head to the ground; but from the back it is only four; ſo that the head and neck are above three feet long. From the top of the head to the rump, when the neck is ſtretched out in a right line, it is ſix feet long, and the tail is about a foot more. One of the wings, without the feathers, is a foot and an half; and being ſtretched out, with the feathers, is three feet.

The plumage is much alike in all; that is,

generally black and white; though ſome of them are ſaid to be grey. The greateſt feathers are at the extremities of the wings and tail, and the largeſt are generally white. The next row is black and white; and of the ſmall feathers, on the back and belly, ſome are white and others black. There are no feathers on the ſides, nor yet on the thighs, nor under the wings. The lower part of the neck, about half way, is covered with ſtill ſmaller feathers than thoſe on the belly and back; and thoſe, like the former, alſo are of different colours.

All theſe feathers are of the ſame kind, and peculiar to the oſtrich; for other birds have ſeveral ſorts, ſome of which are ſoft and downy, and others hard and ſtrong. Oſtrich feathers are almoſt all as ſoft as down, being utterly unfit to ſerve the animal for flying, and ſtill leſs adapted to be a proper defence againſt external injury. The feathers of other birds have the webs broader on one ſide than the other, but thoſe of the oſtrich have their ſhaft exactly in the middle. The upper part of the head and neck are covered with a very fine clear white hair, that ſhines like the briſtles of an hog; and in ſome places there are ſmall tufts of it, conſiſting of about twelve hairs, which grow from a ſingle ſhaft about the thickneſs of a pin.

At the end of each wing, there is a kind of ſpur almoſt like the quill of a porcupine. It is

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an inch long, being hollow and of an horny ſubſtance. There are two of theſe on each wing; the largeſt of which is at the extremity of the bone of the wing, and the other a foot lower. The neck ſeems to be more ſlender, in proportion to that of other birds, from its not being furniſhed with feathers. The ſkin in this part is of a livid fleſh colour, which ſome improperly would have to be blue. The bill is ſhort and pointed, and two inches and an half at the beginning. The external form of the eye is like that of a man, the upper eye-lid being adorned with eye-laſhes which are longer than thoſe on the lid below. The tongue is ſmall, very ſhort, and compoſed of cartilages, ligaments, and membranes, intermixed with fleſhy fibres. In ſome it is about an inch long, and very thick at the bottom. In others it is but half an inch, being a little forked at the end.

The thighs are very fleſhy and large, being covered with a white ſkin, inclining to redneſs, and wrinkled in the manner of a net, whoſe meſhes will admit the end of a finger. Some have very ſmall feathers here and there on the thighs; and others again have neither feathers nor wrinkles. What are called the legs of birds in this are covered before with large ſcales. The end of the foot is cloven, and has two very large toes, which, like the leg, are covered with ſcales. Theſe toes are of unequal ſizes. The

largeſt, which is on the inſide, is ſeven inches long, including the claw, which is near three fourths of an inch in length, and almoſt as broad. The other toe is but four inches long, and is without a claw.

The internal parts of this animal are formed with no leſs ſurpriſing peculiarity. At the top of the breaſt, under the ſkin, the fat is two inches thick; and on the fore-part of the belly it is as hard as ſuet, and about two inches and an half thick in ſome places. It has two diſtinct ſtomachs. The firſt, which is lowermoſt, in its natural ſituation ſomewhat reſembles the crop in other birds; but it is conſiderably larger than the other ſtomach, and is furniſhed with ſtrong muſcular fibres, as well circular as longitudinal. The ſecond ſtomach, or gizzard, has outwardly the ſhape of the ſtomach of a man; and upon opening is always found filled with a variety of diſcordant ſubſtances; hay, graſs, barley, beans, bones, and ſtones, ſome of which exceed in ſize a pullet's egg. The kidneys are eight inches long and two broad, and differ from thoſe of other birds in not being divided into lobes. The heart and lungs are ſeparated by a midriff, as in quadrupedes; and the parts of generation alſo bear a very ſtrong reſemblance and analogy.

Such is the ſtructure of this animal, forming the ſhade that unites birds and quadrupedes;

and from this ſtructure its habits and manners are entirely peculiar. It is a native only of the torrid regions of Africa, and has long been celebrated by thoſe who have had occaſion to mention the animals of that region. Its fleſh is proſcribed in Scripture as unfit to be eaten: and moſt of the ancient writers deſcribe it as well known in their times. Like the race of the elephant, it is tranſmitted down without mixture; and has never been known to breed out of that country which firſt produced it. It ſeems formed to live among the ſandy and burning deſerts of the torrid zone; and, as in ſome meaſure it owes its birth to their genial influence, ſo it ſeldom migrates into tracts more mild or more fertile. As that is the peculiar country of the elephant, the rhinoceros, and camel, ſo it may readily be ſuppoſed capable of affording a retreat to the oſtrich. They inhabit from preference the moſt ſolitary and horrid deſerts, where there are few vegetables to clothe the ſurface of the earth, and where the rain never comes to refreſh it. The Arabians aſſert that the oſtrich never drinks; and the place of its habitation ſeems to confirm the aſſertion. In theſe formidable regions, oſtriches are ſeen in large flocks, which to the diſtant ſpectator appear like a regiment of cavalry, and have often alarmed a whole caravan. There is no deſert, how barren ſoever, but what is capable of ſupplying

plying theſe animals with proviſion; they eat almoſt every thing; and theſe barren tracts are thus doubly grateful, as they afford both food and ſecurity. The oſtrich is of all other animals the moſt voracious. It will devour leather, graſs, hair, iron, ſtones, or any thing that is given. Nor are its powers of digeſtion leſs in ſuch things as are digeſtible. Thoſe ſubſtances which the coats of the ſtomach cannot ſoften, paſs whole; ſo that glaſs, ſtones, or iron, are excluded in the form in which they were devoured. All metals, indeed, which are ſwallowed by any animal, loſe a part of their weight, and often the extremities of their figure, from the action of the juices of the ſtomach upon their ſurface. A quarter piſtole, which was ſwallowed by a duck, loſt ſeven grains of its weight in the gizzard before it was voided; and it is probable that a ſtill greater diminution of weight would happen in the ſtomach of an oſtrich; conſidered in this light, therefore, this animal may be ſaid to digeſt iron; but ſuch ſubſtances ſeldom remain long enough in the ſtomach of any animal to undergo ſo tedious a diſſolution. However this be, the oſtrich ſwallows almoſt every thing preſented to it. Whether this be from the neceſſity which ſmaller birds are under of picking up gravel to keep the coats of their ſtomach aſunder, or whether it be from a want of diſtinguiſhing by the taſte what

ſubſtances are fit and what incapable of digeſtion; certain it is, that in the oſtrich diſſected by Ranby there appeared ſuch a quantity of heterogeneous ſubſtances, that it was wonderful how any animal could digeſt ſuch an overcharge of nouriſhment. Valiſnieri alſo found the firſt ſtomach filled with a quantity of incongruous ſubſtances; graſs, nuts, cords, ſtones, glaſs, braſs, copper, iron, tin, lead, and wood; a piece of ſtone was found among the reſt that weighed more than a pound. He ſaw one of theſe animals that was killed by devouring a quantity of quick-lime. It would ſeem that the oſtrich is obliged to fill up the great capacity of its ſtomach in order to be at eaſe; but that nutritious ſubſtances not occurring, it pours in whatever offers to ſupply the void.

In their native deſerts, however, it is probable they live chiefly upon vegetables, where they lead an inoffenſive and ſocial life; the male, as Thevenot aſſures us, aſſorting with the female with connubial fidelity. They are ſaid to be very much inclined to venery; and the make of the parts in both ſexes ſeems to confirm the report. It is probable alſo they copulate, like other birds, by compreſſion; and they lay very large eggs, ſome of them being above five inches in diameter, and weighing above fifteen pounds. Theſe eggs have a very hard ſhell, ſomewhat reſembling thoſe of the crocodile, except

except that thoſe of the latter are leſs and rounder.

The ſeaſon for laying depends on the climate where the animal is bred. In the northern parts of Africa, this ſeaſon is about the beginning of July; in the ſouth, it is about the latter end of December. Theſe birds are very prolific, and lay generally from forty to fifty eggs at one clutch. It has been commonly reported that the female depoſits them in the ſand; and, covering them up, leaves them to be hatched by the heat of the climate, and then permits the young to ſhift for themſelves. Very little of this however is true: no bird has a ſtronger affection for her young than the oſtrich, nor none watches her eggs with greater aſſiduity. It happens, indeed, in thoſe hot climates, that there is leſs neceſſity for the continual incubation of the female; and ſhe more frequently leaves her eggs, which are in no fear of being chilled by the weather: but though ſhe ſometimes forſakes them by day, ſhe always carefully broods over them by night; and Kolben, who has ſeen great numbers of them at the Cape of Good Hope, affirms that they ſit on their eggs like other birds, and that the male and female take this office by turns, as he had frequent opportunities of obſerving. Nor is it more true what is ſaid of their forſaking their young after they are excluded the ſhell. On the contrary,

the young ones are not even able to walk for ſeveral days after they are hatched. During this time, the old ones are very aſſiduous in ſupplying them with graſs, and very careful to defend them from danger: nay, they encounter every danger in their defence. It was a way of taking them among the ancients, to plant a number of ſharp ſtakes round the oſtrich's neſt in her abſence, upon which ſhe pierced herſelf at her return. The young, when brought forth, are of an aſh-colour the firſt year, and are covered with feathers all over. But in time theſe feathers drop; and thoſe parts which are covered aſſume a different and more becoming plumage.

The beauty of a part of this plumage, particularly the long feathers that compoſe the wings and tail, is the chief reaſon that man has been ſo active in purſuing this harmleſs bird to its deſerts, and hunting it with no ſmall degree of expence and labour. The ancients uſed thoſe plumes in their helmets; the ladies of the Eaſt make them an ornament in their dreſs; and among us, our undertakers and our fine gentlemen ſtill make uſe of them to decorate their hearſes and their hats. Thoſe feathers which are plucked from the animal while alive are much more valued than thoſe taken when dead, the latter being dry, light, and ſubject to be worm-eaten.

Beſide the value of their plumage, ſome of the

the ſavage nations of Africa hunt them alſo for their fleſh; which they conſider as a dainty. They ſometimes alſo breed theſe birds tame to eat the young ones, of which the female is ſaid to be the greateſt delicacy. Some nations have obtained the name of Struthophagi, or Oſtrich-eaters, from their peculiar fondneſs for this food; and even the Romans themſelves were not averſe to it. Apicius gives us a receipt for making ſauce for the oſtrich; and Heliogabalus is noted for having dreſſed the brains of ſix hundred oſtriches in one diſh; for it was his cuſtom never to eat but of one diſh in a day, but that was an expenſive one. Even among the Europeans now, the eggs of the oſtrich are ſaid to be well taſted, and extremely nouriſhing; but they are too ſcarce to be fed upon, although a ſingle egg be a ſufficient entertainment for eight men.

As the ſpoils of the oſtrich are thus valuable, it is not to be wondered at that man has become their moſt aſſiduous purſuer. For this purpoſe, the Arabians train up their beſt and fleeteſt horſes, and hunt the oſtrich ſtill in view. Perhaps, of all other varieties of the chace, this, though the moſt laborious, is yet the moſt entertaining. As ſoon as the hunter comes within ſight of his prey he puts on his horſe with a gentle gallop, ſo as to keep the oſtrich ſtill in ſight; yet not ſo as to terrify him from the plain into the mountains. Of all known animals that

make uſe of their legs in running, the oſtrich is by far the ſwifteſt: upon obſerving himſelf therefore purſued at a diſtance, he begins to run at firſt but gently; either inſenſible of his danger, or ſure of eſcaping. In this ſituation he ſomewhat reſembles a man at full ſpeed; his wings, like two arms, keep working with a motion correſpondent to that of his legs; and his ſpeed would very ſoon ſnatch him from the view of his purſuers, but, unfortunately for the ſilly creature, inſtead of going off in a direct line, he takes his courſe in circles; while the hunters ſtill make a ſmall courſe within, relieve each other, meet him at unexpected turns, and keep him thus ſtill employed, ſtill followed, for two or three days together. At laſt, ſpent with fatigue and famine, and finding all power of eſcape impoſſible, he endeavours to hide himſelf from thoſe enemies he cannot avoid, and covers his head in the ſand, or the firſt thicket he meets. Sometimes, however, he attempts to face his purſuers; and, though in general the moſt gentle animal in nature, when driven to deſperation he defends himſelf with his beak, his wings and his feet. Such is the force of his motion, that a man would be utterly unable to withſtand him in the ſhock.

The Struthophagi have another method of taking this bird: they cover themſelves with an oſtrich's ſkin, and paſſing up an arm through the

the neck, thus counterfeit all the motions of this animal. By this artifice they approach the oſtrich, which becomes an eaſy prey. He is ſometimes alſo taken by dogs and nets: but the moſt uſual way is that mentioned above.

When the Arabians have thus taken an oſtrich, they cut its throat, and making a ligature below the opening, they ſhake the bird, as one would rinſe a barrel: then taking off the ligature, there runs out from the wound in the throat a conſiderable quantity of blood mixed with the fat of the animal; and this is conſidered as one of their greateſt dainties. They next flay the bird; and of the ſkin, which is ſtrong and thick, ſometimes make a kind of veſt, which anſwers the purpoſes of a cuiraſs and a buckler.

There are others who, more compaſſionate or more provident, do not kill their captive, but endeavour to tame it, for the purpoſes of ſupplying thoſe feathers which are in ſo great requeſt. The inhabitants of Dara and Lybia breed up whole flocks of them, and they are tamed with very little trouble. But it is not for their feathers alone that they are prized in this domeſtic ſtate; they are often ridden upon, and uſed as horſes. Moore aſſures us, that at Joar he ſaw a man travelling upon an oſtrich; and Adanſon aſſerts that, at the factory of Podore, he had two oſtriches, which were then young, the ſtrongeſt of which ran ſwifter than the beſt Engliſh

racer, although he carried two negroes on his back. As ſoon as the animal perceived that it was loaded, it ſet off running with all its force, and made ſeveral circuits round the village; till at length the people were obliged to ſtop it by barring up the way. How far this ſtrength and ſwiftneſs may be uſeful to mankind, even in a poliſhed ſtate, is a matter that perhaps deſerves enquiry. Poſterity may avail themſelves of this creature's abilities; and riding upon an oſtrich may one day become the favourite, as it moſt certainly is the ſwifteſt, mode of conveyance.

The parts of this animal are ſaid to be convertible to many ſalutary purpoſes in medicine. The fat is ſaid to be emollient and relaxing; that while it relaxes the tendons, it fortifies the nervous ſyſtem; and being applied to the region of the loins, it abates the pains of the ſtone in the kidney. The ſhell of the egg powdered, and given in proper quantities, is ſaid to be uſeful in promoting urine, and diſſolving the ſtone in the bladder. The ſubſtance of the egg itſelf is thought to be peculiarly nouriſhing: however, Galen, in mentioning this, aſſerts, that the eggs of hens and pheaſants are good to be eaten; thoſe of geeſe and oſtriches are the worſt of all.

CHAP.

CHAP. V.

The Emu.

OF this bird, which many call the American Oſtrich, but little is certainly known. It is an inhabitant of the New Continent; and the travellers who have mentioned it, ſeem to have been more ſolicitous in proving its affinity to the oſtrich, than in deſcribing thoſe peculiarities which diſtinguiſh it from all others of the feathered creation.

It is chiefly found in Guiana, along the banks of the Oroonoko, in the inland provinces of Braſil and Chili, and the vaſt foreſts that border on the mouth of the river Plata. Many other parts of South America were known to have them; but as men multiplied, theſe large and timorous birds either fell beneath their ſuperior power, or fled from their vicinity.

The Emu, though not ſo large as the oſtrich, is only ſecond to it in magnitude. It is by much the largeſt bird in the New Continent; and is generally found to be ſix feet high, meaſuring from its head to the ground. Its legs are three feet long; and its thigh is near as thick as that of a man. The toes differ from thoſe of the oſtrich; as there are three in the American bird, and but two in the former. Its

neck is long, its head ſmall, and the bill flatted, like that of the oſtrich; but, in all other reſpects, it more reſembles a caſſowary, a large bird, to be deſcribed hereafter. The form of the body appears round, the wings are ſhort, and entirely unfitted for flying, and it wants a tail. It is covered from the back and rump with long feathers, which fall backward, and cover the anus: theſe feathers are grey upon the back, and white on the belly. It goes very ſwiftly, and ſeems aſſiſted in its motion by a kind of tubercle behind, like an heel, upon which, on plain ground, it treads very ſecurely: in its courſe it uſes a very odd kind of action, lifting up one wing, which it keeps elevated for a time; till letting it drop, it lifts up the other. What the bird's intention may be in thus keeping only one wing up, is not eaſy to diſcover; whether it makes uſe of this as a ſail to catch the wind, or whether as a rudder to turn its courſe, in order to avoid the arrows of the Indians, yet remains to be aſcertained: however this be, the emu runs with ſuch a ſwiftneſs, that the fleeteſt dogs are thrown out in the purſuit. One of them, finding itſelf ſurrounded by the hunters, darted among the dogs with ſuch fury that they made way to avoid its rage; and it eſcaped, by its amazing velocity, in ſafety to the mountains.

As this bird is but little known, ſo travellers have

have given a loofe to their imaginations in deſcribing ſome of its actions, which they were confcious could not be eaſily contradicted. This animal, ſays Nierenberg, is very peculiar in the hatching of its young. The male compels twenty or thirty of the females to lay their eggs in one neſt; he then, when they have done laying, chaſes them away, and places himſelf upon the eggs; however, he takes the ſingular precaution of laying two of the number aſide, which he does not ſit upon. When the young ones come forth, thefe two eggs are addled; which the male having foreſeen, breaks one, and then another, upon which multitudes of flies are found to fettle; and thefe fupply the young brood with a fufficiency of proviſion, till they are able to ſhift for themfelves.

On the other hand, Wafer aſſerts, that he has ſeen great quantities of this animal's eggs on the deſart ſhores, north of the river Plata; where they were buried in the ſand, in order to be hatched by the heat of the climate. Both this, as well as the preceding account, may be doubted: and it is more probable that it was the crocodile's eggs which Wafer had ſeen, which are undoubtedly hatched in that manner.

When the young ones are hatched, they are familiar, and follow the firſt perſon they meet. I have been followed myſelf, ſays Wafer, by many

many of these young ostriches; which, at first, are extremely harmless and simple: but as they grow older, they become more cunning and distrustful; and run so swift, that a greyhound can scarcely overtake them. Their flesh, in general, is good to be eaten; especially if they be young. It would be no difficult matter to rear up flocks of these animals tame, particularly as they are naturally so familiar; and they might be found to answer domestic purposes, like the hen, or the turkey. Their maintenance could not be expensive, if, as Narborough says, they live entirely upon grass,

CHAP. VI.

The Cassowary.

THE Cassowary is a bird which was first brought into Europe by the Dutch, from Java, in the East-Indies, in which part of the world it is only to be found. Next to the preceding, it is the largest and the heaviest of the feathered species.

The cassowary, though not so large as the former, yet appears more bulky to the eye; its body being nearly equal, and its neck and legs much thicker and stronger in proportion; this conformation gives it an air of strength and force, which the fierceness and singularity of its countenance

Hartnet del. J. Taylor sculp.

The Caſsowary.

countenance conſpire to render formidable. It is five feet and an half long, from the point of the bill to the extremity of the claws. The legs are two feet and an half high, from the belly to the end of the claws. The head and neck together are a foot and an half; and the largeſt toe, including the claw, is five inches long. The claw alone of the leaſt toe is three inches and an half in length. The wing is ſo ſmall, that it does not appear; it being hid under the feathers of the back. In other birds, a part of the feathers ſerve for flight, and are different from thoſe that ſerve for merely covering; but in the caſſowary, all the feathers are of the ſame kind, and outwardly of the ſame colour. They are generally double; having two long ſhafts, which grow out of a ſhort one, which is fixed in the ſkin. Thoſe that are double are always of an unequal length; for ſome are fourteen inches long, particularly on the rump; while others are not above three. The beards that adorn the ſtem or ſhaft, are from about half way to the end, very long, and as thick as an horſe-hair, without being ſubdivided into fibres. The ſtem or ſhaft is flat, ſhining, black, and knotted below; and from each knot there proceeds a beard: likewiſe, the beards at the end of the large feathers are perfectly black; and towards the root of a grey tawny colour; ſhorter, more ſoft, and throwing out fine fibres, like down;

down; ſo that nothing appears except the ends, which are hard and black; becauſe the other part, compoſed of down, is quite covered. There are feathers on the head and neck; but they are ſo ſhort, and thinly ſown, that the bird's ſkin appears naked, except towards the hinder part of the head, where they are a little longer. The feathers which adorn the rump are extremely thick; but do not differ, in other reſpects, from the reſt, excepting their being longer. The wings, when they are deprived of their feathers, are but three inches long; and the feathers are like thoſe on other parts of the body. The ends of the wings are adorned with five prickles, of different lengths and thickneſs, which bend like a bow: theſe are hollow from the roots to the very points, having only that ſlight ſubſtance within which all quills are known to have. The longeſt of theſe prickles is eleven inches; and it is a quarter of an inch in diameter at the root, being thicker there than towards the extremity; the point ſeems broken off.

The part, however, which moſt diſtinguiſhes this animal is the head; this, though ſmall, like that of an oſtrich, does not fail to inſpire ſome degree of terror. It is bare of feathers, and is in a manner armed with an helmet of horny ſubſtance, that covers it from the root of the bill to near half the head backwards.

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This helmet is black before and yellow behind. Its ſubſtance is very hard, being formed by the elevation of the bone of the ſkull; and it conſiſts of ſeveral plates, one over another, like the horn of an ox. Some have ſuppoſed that this was ſhed every year with the feathers; but the moſt probable opinion is, that it only exfoliates ſlowly like the beak. To the peculiar oddity of this natural armour may be added the colour of the eye in this animal, which is a bright yellow, and the globe being above an inch and an half in diameter, gives it an air equally fierce and extraordinary. At the bottom of the upper eye-lid, there is a row of ſmall hairs, over which there is another row of black hair, which look pretty much like an eye-brow. The lower eye-lid, which is the largeſt of the two, is furniſhed alſo with plenty of black hair. The hole of the ear is very large and open, being only covered with ſmall black feathers. The ſides of the head, about the eye and ear, being deſtitute of any covering, are blue, except the middle of the lower eye-lid, which is white. The part of the bill which anſwers to the upper jaw in other animals, is very hard at the edges above, and the extremity of it like that of a turkey-cock. The end of the lower mandible is ſlightly notched, and the whole is of a greyiſh brown, except a green ſpot on each ſide. As the beak admits a very wide opening, this contributes

tributes not a little to the bird's menacing appearance. The neck is of a violet colour, inclining to that of ſlate; and it is red behind in ſeveral places, but chiefly in the middle. About the middle of the neck before, at the riſe of the large feathers, there are two proceſſes formed by the ſkin, which reſemble ſomewhat the gills of a cock, but that they are blue as well as red. The ſkin which covers the fore-part of the breaſt, on which this bird leans and reſts, is hard, callous, and without feathers. The thighs and legs are covered with feathers, and are extremely thick, ſtrong, ſtraight, and covered with ſcales of ſeveral ſhapes; but the legs are thicker a little above the foot than in any other place. The toes are likewiſe covered with ſcales, and are but three in number; for that which ſhould be behind is wanting. The claws are of a hard ſolid ſubſtance, black without and white within.

The internal parts are equally remarkable. The caſſowary unites with the double ſtomach of animals that live upon vegetables, the ſhort inteſtines of thoſe that live upon fleſh. The inteſtines of the caſſowary are thirteen times ſhorter than thoſe of the oſtrich. The heart is very ſmall, being but an inch and an half long, and an inch broad at the baſe. Upon the whole, it has the head of a warrior, the eye of a lion, the

the defence of a porcupine, and the ſwiftneſs of a courſer.

Thus formed for a life of hoſtility, for terrifying others, and for its own defence, it might be expected that the caſſowary was one of the moſt fierce and terrible animals of the creation. But nothing is ſo oppoſite to its natural character, nothing ſo different from the life it is contented to lead. It never attacks others; and inſtead of the bill, when attacked, it rather makes uſe of its legs, and kicks like an horſe, or runs againſt its purſuer, beats him down, and treads him to the ground.

The manner of going of this animal is not leſs extraordinary than its appearance. Inſtead of going directly forward, it ſeems to kick up behind with one leg, and then making a bound onward with the other, it goes with ſuch prodigious velocity, that the ſwifteſt racer would be left far behind.

The ſame degree of voraciouſneſs which we perceived in the oſtrich, obtains as ſtrongly here. The caſſowary ſwallows every thing that comes within the capacity of its gullet. The Dutch aſſert that it can devour not only glaſs, iron, and ſtones, but even live and burning coals, without teſtifying the ſmalleſt fear, or feeling the leaſt injury. It is ſaid that the paſſage of the food through its gullet is performed ſo ſpeedily, that even the very eggs which it has ſwallowed

ſwallowed whole paſs through it unbroken, in the ſame form they went down. In fact, the alimentary canal of this animal, as was obſerved above, is extremely ſhort; and it may happen that many kinds of food are indigeſtible in its ſtomach, as wheat or currants are to man, when ſwallowed whole.

The caſſowary's eggs are of a grey aſh-colour, inclining to green. They are not ſo large nor ſo round as thoſe of the oſtrich. They are marked with a number of little tubercles of a deep green, and the ſhell is not very thick. The largeſt of theſe is found to be fifteen inches round one way, and about twelve the other.

The ſouthern parts of the moſt eaſtern Indies ſeems to be the natural climate of the caſſowary. His domain, if we may ſo call it, begins where that of the oſtrich terminates. The latter has never been found beyond the Ganges; while the caſſowary is never ſeen nearer than the iſlands of Banda, Sumatra, Java, the Molucca Iſlands, and the correſponding parts of the continent. Yet even here this animal ſeems not to have multiplied in any conſiderable degree, as we find one of the kings of Java making a preſent of one of theſe birds to the captain of a Dutch ſhip, conſidering it as a very great rarity. The oſtrich, that has kept in the deſert and unpeopled regions of Africa, is ſtill numerous, and the unrivalled tenant of its own inhoſpitable cli-

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mate. But the caſſowary, that is the inhabitant of a more peopled and poliſhed region, is growing ſcarcer every day. It is thus that in proportion as man multiplies, all the ſavage and noxious animals fly before him: at his approach they quit their ancient habitations, how adapted ſoever they may be to their natures, and ſeek a more peaceable though barren retreat; where they willingly exchange plenty for freedom; and encounter all the dangers of famine, to avoid the oppreſſions of an unrelenting deſtroyer.

CHAP. VII.

The Dodo.

MANKIND have generally made ſwiftneſs the attribute of birds; but the Dodo has no title to this diſtinction. Inſtead of exciting the idea of ſwiftneſs by its appearance, it ſeems to ſtrike the imagination as a thing the moſt unwieldy and inactive of all nature. Its body is maſſive, almoſt round, and covered with grey feathers; it is juſt barely ſupported upon two ſhort thick legs like pillars, while its head and neck riſe from it in a manner truly groteſque. The neck, thick and purſy, is joined to the head, which conſiſts of two great chaps, that open far behind the eyes, which are large, black and

and prominent; ſo that the animal when it gapes ſeems to be all mouth. The bill therefore is of an extraordinary length, not flat and broad, but thick, and of a bluiſh white, ſharp at the end, and each chap crooked in oppoſite directions. They reſemble two pointed ſpoons that are laid together by the backs. From all this reſults a ſtupid and voracious phyſiognomy; which is ſtill more encreaſed by a bordering of feathers round the root of the beak, and which give the appearance of an hood or cowl, and finiſh this picture of ſtupid deformity. Bulk, which in other animals implies ſtrength, in this only contributes to inactivity. The oſtrich, or the caſſowary, are no more able to fly than the animal before us; but then they ſupply that defect by their ſpeed in running. The dodo ſeems weighed down by its own heavineſs, and has ſcarce ſtrength to urge itſelf forward. It ſeems among birds what the ſloth is among quadrupedes, an unreſiſting thing, equally incapable of flight or defence. It is furniſhed with wings, covered with ſoft aſh-coloured feathers, but they are too ſhort to aſſiſt it in flying. It is furniſhed with a tail, with a few ſmall curled feathers; but this tail is diſproportioned and diſplaced. Its legs are too ſhort for running, and its body too fat to be ſtrong. One would take it for a tortoiſe that had ſupplied itſelf with the feathers of a bird; and that thus

dreſſed out with the inſtruments of flight, it was only ſtill the more unwieldy.

This bird is a native of the Iſle of France; and the Dutch, who firſt diſcovered it there, called it in their language the *nauſeous bird*, as well from its diſguſting figure, as from the bad taſte of its fleſh. However, ſucceeding obſervers contradict this firſt report, and aſſert that its fleſh is good and wholeſome eating. It is a ſilly ſimple bird, as may very well be ſuppoſed from its figure, and is very eaſily taken. Three or four dodos are enough to dine an hundred men.

Whether the dodo be the ſame bird with that which ſome travellers have deſcribed under the bird of Nazareth, yet remains uncertain. The country from whence they both come is the ſame; their incapacity of flying is the ſame; the form of the wings and body in both are ſimilar; but the chief difference given is in the colour of the feathers, which in the female of the bird of Nazareth are ſaid to be extremely beautiful; and in the length of their legs, which in the dodo are ſhort; in the other, are deſcribed as long. Time and future obſervation muſt clear up theſe doubts; and the teſtimony of a ſingle witneſs, who ſhall have ſeen both, will throw more light on the ſubject than the reaſonings of an hundred philoſophers.

CHAP.

CHAP. VIII.

Of Rapacious Birds in general.

THERE ſeems to obtain a general reſemblance in all the claſſes of nature. As among quadrupedes a part were ſeen to live upon the vegetable productions of the earth, and another part upon the fleſh of each other, ſo among birds, ſome live upon vegetable food, and others by rapine, deſtroying all ſuch as want force or ſwiftneſs to procure their ſafety. By thus peopling the woods with animals of different diſpoſitions, Nature has wiſely provided for the multiplication of life; ſince, could we ſuppoſe that there were as many animals produced as there were vegetables ſupplied to ſuſtain them, yet there might ſtill be another claſs of animals formed, which could find a ſufficient ſuſtenance by feeding upon ſuch of the vegetable feeders as happened to fall by the courſe of nature. By this contrivance, a greater number will be ſuſtained upon the whole; for the numbers would be but very thin, were every creature a candidate for the ſame food. Thus, by ſupplying a variety of appetites, Nature has alſo multiplied life in her productions.

In thus varying their appetites, Nature has alſo varied the form of the animal; and while

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ſhe has given ſome an inſtinctive paſſion for animal food, ſhe has alſo furniſhed them with powers to obtain it. All land-birds of the rapacious kinds are furniſhed with a large head, and a ſtrong crooked beak, notched at the end, for the purpoſe of tearing their prey. They have ſtrong ſhort legs, and ſharp crooked talons for the purpoſe of ſeizing it. Their bodies are formed for war, being fibrous and muſcular; and their wings for ſwiftneſs of flight, being well feathered and expanſive. The ſight of ſuch as prey by day is aſtoniſhingly quick; and ſuch as ravage by night have their ſight ſo fitted as to ſee objects in darkneſs with extreme preciſion.

Their internal parts are equally formed for the food they ſeek for. Their ſtomach is ſimple and membranous, and wrapped in fat to encreaſe the powers of digeſtion; and their inteſtines are ſhort and glandular. As their food is ſucculent and juicy, they want no length of inteſtinal tube to form it into proper nouriſhment. Their food is fleſh; which does not require a ſlow digeſtion, to be converted into a ſimilitude of ſubſtance to their own.

Thus formed for war, they lead a life of ſolitude and rapacity. They inhabit, by choice, the moſt lonely places and the moſt deſart mountains. They make their neſts in the clefts of rocks, and on the higheſt and moſt inacceſſible

trees of the foreſt. Whenever they appear in the cultivated plain, or the warbling grove, it is only for the purpoſes of depredation; and are gloomy intruders on the general joy of the landſcape. They ſpread terror wherever they approach: all that variety of muſic which but a moment before enlivened the grove, at their appearing is inſtantly at an end: every order of leſſer birds ſeek for ſafety, either by concealment or flight; and ſome are even driven to take protection with man, to avoid their leſs merciful purſuers.

It would indeed be fatal to all the ſmaller race of birds, if, as they are weaker than all, they were alſo purſued by all; but it is contrived wiſely for their ſafety, that every order of carnivorous birds ſeek only for ſuch as are of the ſize moſt approaching their own. The eagle flies at the buſtard or the pheaſant; the ſparrow-hawk purſues the thruſh and the linnet. Nature has provided that each ſpecies ſhould make war only on ſuch as are furniſhed with adequate means of eſcape. The ſmalleſt birds avoid their purſuers by the extreme agility, rather than the ſwiftneſs of their flight; for every order would ſoon be at an end, if the eagle, to its own ſwiftneſs of wing, added the verſatility of the ſparrow.

Another circumſtance which tends to render the tyranny of theſe animals more ſupportable is, that

that they are leſs fruitful than other birds; breeding but few at a time. Thoſe of the larger kind ſeldom produce above four eggs, often but two; thoſe of the ſmaller kinds, never above ſix or ſeven. The pigeon, it is true, that is their prey, never breeds above two at a time; but then ſhe breeds every month in the year. The carnivorous kinds only breed annually, and of conſequence their fecundity is ſmall in compariſon.

As they are fierce by nature, and are difficult to be tamed, ſo this fierceneſs extends even to their young, which they force from the neſt ſooner than birds of the gentler kind. Other birds ſeldom forſake their young till able, completely, to provide for themſelves; the rapacious kinds expel them from the neſt at a time when they ſtill ſhould protect and ſupport them. This ſeverity to their young proceeds from the neceſſity of providing for themſelves. All animals that, by the conformation of their ſtomach and inteſtines, are obliged to live upon fleſh, and ſupport themſelves by prey, though they may be mild when young, ſoon become fierce and miſchievous, by the very habit of uſing thoſe arms with which they are ſupplied by Nature. As it is only by the deſtruction of other animals that they can ſubſiſt, they become more furious every day; and even the parental feelings are overpowered in their general habits of cruelty.

If the power of obtaining a ſupply be difficult, the old ones ſoon drive their brood from the neſt to ſhift for themſelves, and often deſtroy them in a fit of fury cauſed by hunger.

Another effect of this natural and acquired ſeverity is, that almoſt all birds of prey are unſociable. It has long been obſerved, by Ariſtotle, that all birds, with crooked beaks and talons, are ſolitary: like quadrupedes of the cat kind, they lead a lonely wandering life, and are united only in pairs, by that inſtinct which overpowers their rapacious habits of enmity with all other animals. As the male and female are often neceſſary to each other in their purſuits, ſo they ſometimes live together; but, except at certain ſeaſons, they moſt uſually prowl alone; and, like robbers, enjoy in ſolitude the fruits of their plunder.

All birds of prey are remarkable for one ſingularity, for which it is not eaſy to account. All the males of theſe birds are about a third leſs, and weaker than the females; contrary to what obtains among quadrupedes, among which the males are always the largeſt and boldeſt: from thence the male is called by falconers, a *tarcel*; that is, a tierce or third leſs than the other. The reaſon of this difference cannot proceed from the neceſſity of a larger body in the female for the purpoſes of breeding, and that her volume is thus encreaſed by the quantity of her eggs;

eggs; for in other birds, that breed much faſter, and that lay in much greater proportion, ſuch as the hen, the duck, or the pheaſant, the male is by much the largeſt of the two. Whatever be the cauſe, certain it is, that the females, as Willughby expreſſes it, are of greater ſize, more beautiful and lovely for ſhape and colours, ſtronger, more fierce and generous, than the males; whether it may be that it is neceſſary for the female to be thus ſuperior; as it is incumbent upon her to provide, not only for herſelf, but her young ones alſo.

Theſe birds, like quadrupedes of the carnivorous kind, are all lean and meagre. Their fleſh is ſtringy and ill-taſted, ſoon corrupting, and tinctured with the flavour of that animal food upon which they ſubſiſt. Nevertheleſs, Belonius aſſerts, that many people admire the fleſh of the vulture and falcon, and dreſs them for eating, when they meet with any accident that unfits them for the chace. He aſſerts, that the oſprey, a ſpecies of the eagle, when young, is excellent food: but he contents himſelf with adviſing us, to breed theſe birds up for our pleaſure rather in the field, than for the table.

Of land-birds of a rapacious nature, there are five kinds. The eagle kind, the hawk kind, the vulture kind, the horned, the ſcreech owl kind. The diſtinctive marks of this claſs are

taken from their claws and beak: their toes are ſeparated: their legs are feathered to the heel: their toes are four in number; three before, one behind: their beak is ſhort, thick and crooked.

The eagle kind is diſtinguiſhed from the reſt by his beak, which is ſtraight till towards the end, when it begins to hook downwards.

The vulture kind is diſtinguiſhed by the head and neck: he is without feathers.

The hawk kind by the beak; being hooked from the very root.

The horned owl by the feathers at the baſe of the bill ſtanding forwards; and by ſome feathers on the head, that ſtand out, reſembling horns.

The ſcreech owl, by the feathers at the baſe of the bill ſtanding forward, and being without horns.—A deſcription of one in each kind, will ſerve for all the reſt.

CHAP. IX.

The Eagle, and its Affinities.

THE Golden Eagle is the largeſt and the nobleſt of all thoſe birds that have received the name of Eagle. It weighs above twelve pounds. Its length is three feet; the extent of its wings, ſeven feet four inches; the bill is three

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The Eagle.

three inches long, and of a deep blue colour; and the eye of an hazel colour. The ſight and ſenſe of ſmelling are very acute. The head and neck are cloathed with narrow ſharp pointed feathers, and of a deep brown colour, bordered with tawny; but thoſe on the crown of the head, in very old birds, turn grey. The whole body, above as well as beneath, is of a dark brown; and the feathers of the back are finely clouded with a deeper ſhade of the ſame. The wings when cloathed reach to the end of the tail. The quill feathers are of a chocolate colour, the ſhafts white. The tail is of a deep brown, irregularly barred and blotched with an obſcure aſh-colour, and uſually white at the roots of the feathers. The legs are yellow, ſhort, and very ſtrong, being three inches in circumference, and feathered to the very feet. The toes are covered with large ſcales, and armed with the moſt formidable claws, the middle of which are two inches long.

In the rear of this terrible bird follow the *ring-tailed eagle*, the *common eagle*, the *bald eagle*, the *white eagle*, the *kough-footed eagle*, the *erne*, the *black eagle*, the *oſprey*, the *ſea-eagle*, and the *crowned eagle*. Theſe, and others that might be added, form different ſhades in this fierce family; but have all the ſame rapacity, the ſame general form, the ſame habits, and the ſame manner of bringing up their young.

In general, these birds are found in mountainous and ill-peopled countries, and breed among the loftiest cliffs. They chuse those places which are remotest from man, upon whose possessions they but seldom make their depredations, being contented rather to follow the wild game in the forest, than to risque their safety to satisfy their hunger.

This fierce animal may be considered among birds as the lion among quadrupedes; and in many respects they have a strong similitude to each other. They are both possessed of force, and an empire over their fellows of the forest. Equally magnanimous, they disdain smaller plunder; and only pursue animals worthy the conquest. It is not till after having been long provoked, by the cries of the rook or the magpie, that this generous bird thinks fit to punish them with death: the eagle also disdains to share the plunder of another bird; and will take up with no other prey but that which he has acquired by his own pursuits. How hungry soever he may be, he never stoops to carrion; and when satiated, he never returns to the same carcass, but leaves it for other animals, more rapacious and less delicate than he. Solitary, like the lion, he keeps the desert to himself alone; it is as extraordinary to see two pair of eagles in the same mountain, as two lions in the same forest. They keep separate, to find a more ample sup-

ply;

ply; and conſider the quantity of their game as the beſt proof of their dominion. Nor does the ſimilitude of theſe animals ſtop here: they have both ſparkling eyes, and nearly of the ſame colour; their claws are of the ſame form, their breath equally ſtrong, and their cry equally loud and terrifying. Bred both for war, they are enemies of all ſociety: alike fierce, proud, and incapable of being eaſily tamed. It requires great patience and much art to tame an eagle; and even though taken young, and brought under by long aſſiduity, yet ſtill it is a dangerous domeſtic, and often turns its force againſt its maſter. When brought into the field for the purpoſes of fowling, the falconer is never ſure of its attachment; that innate pride, and love of liberty, ſtill prompt it to regain its native ſolitudes; and the moment the falconer ſees it, when let looſe, firſt ſtoop towards the ground, and then riſe perpendicularly into the clouds, he gives up all his former labour for loſt; quite ſure of never beholding his late priſoner more. Sometimes, however, they are brought to have an attachment for their feeder: they are then highly ſerviceable, and liberally provide for his pleaſures and ſupport. When the falconer lets them go from his hand, they play about and hover round him till their game preſents, which they ſee at an immenſe diſtance, and purſue with certain deſtruction.

Of all animals the eagle flies higheſt; and from thence the ancients have given him the epithet of *the bird of Heaven.* Of all others alſo, he has the quickeſt eye; but his ſenſe of ſmelling is far inferior to that of the vulture. He never purſues, therefore, but in ſight; and when he has ſeized his prey, he ſtoops from his height, as if to examine its weight, always laying it on the ground before he carries it off. As his wing is very powerful, yet, as he has but little ſuppleneſs in the joints of the leg, he finds it difficult to riſe when down; however, if not inſtantly purſued, he finds no difficulty in carrying off geeſe and cranes. He alſo carries away hares, lambs, and kids; and often deſtroys fawns and calves, to drink their blood, and carries a part of their fleſh to his retreat. Infants themſelves, when left unattended, have been deſtroyed by theſe rapacious creatures; which probably gave riſe to the fable of Ganymede's being ſnatched up by an eagle to heaven.

An inſtance is recorded in Scotland of two children being carried off by eagles; but fortunately they received no hurt by the way; and, the eagles being purſued, the children were reſtored unhurt out of the neſts to the affrighted parents.

The eagle is thus at all times a formidable neighbour; but peculiarly when bringing up

its young. It is then that the female, as well as the male, exert all their force and induſtry to ſupply their young. Smith, in his Hiſtory of Kerry, relates, that a poor man in that country got a comfortable ſubſiſtence for his family, during a ſummer of famine, out of an eagle's neſt, by robbing the eaglets of food, which was plentifully ſupplied by the old ones. He protracted their aſſiduity beyond the uſual time, by clipping the wings, and retarding the flight of the young, and very probably alſo, as I have known myſelf, by ſo tying them as to encreaſe their cries, which is always found to encreaſe the parent's diſpatch to procure them proviſion. It was lucky, however, that the old eagles did not ſurpriſe the countryman as he was thus employed, as their reſentment might have been dangerous.

It happened ſome time ago, in the ſame country, that a peaſant reſolved to rob the neſt of an eagle, that had built in a ſmall iſland, in the beautiful lake of Killarney. He accordingly ſtripped, and ſwam in upon the iſland while the old ones were away; and, robbing the neſt of its young, he was preparing to ſwim back, with the eaglets tied in a ſtring; but, while he was yet up to his chin in the water, the old eagles returned, and, miſſing their young, quickly fell upon the plunderer, and, in ſpite of all his reſiſtance, diſpatched him with their beaks and talons.

In order to extirpate theſe pernicious birds, there is a law in the Orkney Iſlands which entitles any perſon that kills an eagle to a hen out of every houſe in the pariſh in which the plunderer is killed.

The neſt of the eagle is uſually built in the moſt inacceſſible cliff of the rock, and often ſhielded from the weather by ſome jutting crag that hangs over it. Sometimes, however, it is wholly expoſed to the winds, as well ſideways as above; for the neſt is flat, though built with great labour. It is ſaid that the ſame neſt ſerves the eagle during life; and indeed the pains beſtowed in forming it ſeems to argue as much. One of theſe was found in the Peak of Derbyſhire; which Willughby thus deſcribes. "It was made of great ſticks, reſting one end on "the edge of a rock, the other on two birch "trees. Upon theſe was a layer of ruſhes, and "over them a layer of heath, and upon the "heath ruſhes again; upon which lay one young "one, and an addle egg; and by them a lamb, "a hare, and three heath-pouts. The neſt was "about two yards ſquare, and had no hollow in "it. The young eagle was of the ſhape of "a goſhawk, of almoſt the weight of a gooſe, "rough-footed, or feathered down to the foot, "having a white ring about the tail." Such is the place where the female eagle depoſits her eggs; which ſeldom exceed two at a time in

the

the larger ſpecies, and not above three in the ſmalleſt. It is ſaid that ſhe hatches them for thirty days: but frequently, even of this ſmall number of eggs, a part is addled; and it is extremely rare to find three eaglets in the ſame neſt. It is aſſerted, that as ſoon as the young ones are ſomewhat grown, the mother kills the moſt feeble or the moſt voracious. If this happens, it muſt proceed only from the neceſſities of the parent, who is incapable of providing for their ſupport; and is content to ſacrifice a part to the welfare of all.

The plumage of the eaglets is not ſo ſtrongly marked as when they come to be adult. They are at firſt white; then inclining to yellow; and at laſt of light brown. Age, hunger, long captivity, and diſeaſes, make them whiter. It is ſaid, they live above an hundred years; and that they at laſt die, not of old age, but from the beaks turning inward upon the under mandible, and thus preventing their taking any food. They are equally remarkable, ſays Mr. Pennant, for their longevity, and for their power of ſuſtaining a long abſence from food. One of this ſpecies, which has now been nine years in the poſſeſſion of Mr. Owen Holland, of Conway, lived thirty-two years with the gentleman who made him a preſent of it; but what its age was when the latter received it from Ireland, is unknown. The ſame bird alſo furniſhes a proof of the truth

of

of the other remark; having once, through the neglect of ſervants, endured hunger for twenty-one days, without any ſuſtenance whatever.

Thoſe eagles which are kept tame, are fed with every kind of fleſh, whether freſh or corrupting; and when there is a deficiency of that, bread, or any other proviſion, will ſuffice. It is very dangerous approaching them if not quite tame; and they ſometimes ſend forth a loud piercing lamentable cry, which renders them ſtill more formidable. The eagle drinks but ſeldom; and perhaps, when at liberty, not at all, as the blood of his prey ſerves to quench his thirſt. His excrements are always ſoft and moiſt, and tinged with that whitiſh ſubſtance which, as was ſaid before, mixes in birds with the urine.

Such are the general characteriſtics and habitudes of the eagle; however, in ſome theſe habitudes differ, as the Sea Eagle and the Oſprey live chiefly upon fiſh, and conſequently build their neſts on the ſea-ſhore, and by the ſides of rivers, on the ground among reeds; and often lay three or four eggs, rather leſs than thoſe of a hen, of a white elliptical form. They catch their prey, which is chiefly fiſh, by darting down upon them from above. The Italians compare the violent deſcent of theſe birds on their

their prey, to the fall of lead into water; and call them Aquila Piombina, or the Leaden Eagle.

Nor is the Bald Eagle, which is an inhabitant of North Carolina, leſs remarkable for habits peculiar to itſelf. Theſe birds breed in that country all the year round. When the eaglets are juſt covered with down, and a ſort of white woolly feathers, the female eagle lays again. Theſe eggs are left to be hatched by the warmth of the young ones that continue in the neſt; ſo that the flight of one brood makes room for the next, that are but juſt hatched. Theſe birds fly very heavily; ſo that they cannot overtake their prey, like others of the ſame denomination. To remedy this, they often attend a ſort of fiſhing-hawk, which they purſue, and ſtrip the plunderer of its prey. This is the more remarkable, as this hawk flies ſwifter than they. Theſe eagles alſo generally tend upon fowlers in the winter; and when any birds are wounded, they are ſure to be ſeized by the eagle, though they may fly from the fowler. This bird will often alſo ſteal young pigs, and carry them alive to the neſt, which is compoſed of twigs, ſticks, and rubbiſh: it is large enough to fill the body of a cart; and is commonly full of bones half eaten, and putrid fleſh, the ſtench of which is intolerable.

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The diſtinctive marks of each ſpecies are as follow.

The *golden eagle:* of a tawny iron-colour: the head and neck of a reddiſh iron; the tail-feathers of a dirty white, marked with croſs bands of tawny iron; the legs covered with tawny iron feathers.

The *common eagle:* of a brown colour: the head and upper part of the neck inclining to red; the tail-feathers white, blackening at the ends; the outer ones, on each ſide, of an aſh-colour; the legs covered with feathers of a reddiſh brown.

The *bald eagle:* brown: the head, neck and tail-feathers white; the feathers of the upper part of the leg brown.

The *white eagle:* the whole white.

The *rough-footed eagle:* of a dirty brown: ſpotted under the wings, and on the legs, with white; the feathers of the tail white at the beginning and the point; the leg-feathers dirty brown, ſpotted with white.

The *white-tailed eagle:* dirty brown: head white; the ſtems of the feathers black; the rump inclining to black; the tail-feathers, the firſt half black, the end half white; legs naked.

The *erne:* a dirty iron-colour above, an iron mixed with black below: the head and neck aſh, mixed with cheſnut; the points of the wings

wings blackiſh; the tail-feathers white; the legs naked.

The *black eagle:* blackiſh: the head and upper neck mixed with red; the tail-feathers, the firſt half white, ſpeckled with black; the other half, blackiſh; the leg-feathers dirty white.

The *ſea eagle:* inclining to white, mixed with iron brown; belly white, with iron-coloured ſpots; the covert feathers of the tail whitiſh; the tail-feathers black at the extremity; the upper part of the leg-feathers of an iron brown.

The *oſprey:* brown above; white below; the back of the head white; the outward tail-feathers, on the inner ſide, ſtreaked with white; legs naked.

The *jean le blanc:* above, browniſh grey; below, white, ſpotted with tawny brown; the tail-feathers on the outſide, and at the extremity, brown; on the inſide, white, ſtreaked with brown; legs naked.

The *eagle of Braſil:* blackiſh brown: aſh-colour, mixed in the wings; tail-feathers white; legs naked.

The *Oroonoko eagle:* with a topping, above, blackiſh brown; below, white, ſpotted with black; upper neck yellow; tail-feathers brown, with white circles; leg-feathers white, ſpotted with black.

The *crowned African eagle:* with a topping: the

the tail of an aſh-colour, ſtreaked on the upper ſide with black.

The *eagle of Pondicherry:* cheſnut-colour: the ſix outward tail-feathers black one half.

CHAP. X.

The Condor of America.

WE might now come to ſpeak of the vulture kind, as they hold the next rank to the eagle; but we are interrupted in our method, by the conſideration of an enormous bird, whoſe place is not yet aſcertained; as naturaliſts are in doubt whether to refer it to the eagle tribe, or to that of the vulture. Its great ſtrength, force, and vivacity, might plead for its place among the former; the baldneſs of its head and neck might be thought to degrade it among the latter. In this uncertainty, it will be enough to deſcribe the bird, by the lights we have, and leave future hiſtorians to ſettle its rank in the feathered creation. Indeed, if ſize and ſtrength, combined with rapidity of flight and rapacity, deſerve pre-eminence, no bird can be put in competition with it.

The Condor poſſeſſes, in an higher degree than the eagle, all the qualities that render it formidable, not only to the feathered kind, but to beaſts, and even to man himſelf. Acoſta, Garcilaſſo,

Garcilaſſo, and Des Marchais, aſſert, that it is eighteen feet acroſs, the wings extended. The beak is ſo ſtrong as to pierce the body of a cow; and two of them are able to devour it. They do not even abſtain from man himſelf: but fortunately there are but few of the ſpecies; for if they had been plenty, every order of animals muſt have carried on an unſucceſsful war againſt them. The Indians aſſert, that they will carry off a deer, or a young calf, in their talons, as eagles would an hare or a rabbit; that their ſight is piercing, and their air terrible; that they ſeldom frequent the foreſts, as they require a large ſpace for the diſplay of their wings; but that they are found on the ſea-ſhore, and the banks of rivers, whither they deſcend from their heights of the mountains. By later accounts we learn, that they come down to the ſea-ſhore only at certain ſeaſons, when their prey happens to fail them upon land; that they then feed upon dead fiſh, and ſuch other nutritious ſubſtances as the ſea throws up on the ſhore. We are aſſured, however, that their countenance is not ſo terrible as the old writers have repreſented it; but that they appear of a milder nature than either the eagle or the vulture.

Condamine has frequently ſeen them in ſeveral parts of the mountains of Quito, and obſerved them hovering over a flock of ſheep; and he thinks they would, at a certain time, have

have attempted to carry one off, had they not been ſcared away by the ſhepherds. Labat acquaints us, that thoſe who have ſeen this animal, declare that the body is as large as that of a ſheep; and that the fleſh is tough, and as diſagreeable as carrion. The Spaniards themſelves ſeem to dread its depredations; and there have been many inſtances of its carrying off their children.

Mr. Strong, the maſter of a ſhip, as he was ſailing along the coaſts of Chili, in the thirty-third degree of ſouth latitude, obſerved a bird ſitting upon a high cliff near the ſhore, which ſome of the ſhip's company ſhot with a leaden bullet, and killed. They were greatly ſurpriſed when they beheld its magnitude; for when the wings were extended, they meaſured thirteen feet from one tip to the other. One of the quills was two feet four inches long; and the barrel, or hollow part, was ſix inches and three quarters, and an inch and an half in circumference.

We have a ſtill more circumſtantial account of this amazing bird, by P. Feuillée, the only traveller who has accurately deſcribed it: "In "the valley of Ilo in Peru, I diſcovered a con-"dor, perched on a high rock before me: I "approached within gun-ſhot, and fired; but, "as my piece was only charged with ſwan-ſhot, "the lead was not able ſufficiently to pierce the "bird's

" bird's feathers. I perceived, however, by its " manner of flying, that it was wounded; and " it was with a good deal of difficulty that it " flew to another rock, about five hundred yards " diſtant on the ſea-ſhore. I therefore charged " again with ball, and hit the bird under the " throat, which made it mine. I accordingly " ran up to ſeize it; but, even in death, it was " terrible, and defended itſelf upon its back, " with its claws extended againſt me, ſo that I " ſcarce knew how to lay hold of it. Had it " not been mortally wounded, I ſhould have " found it no eaſy matter to take it; but I " at laſt dragged it down from the rock, and " with the aſſiſtance of one of the ſeamen, I " carried it to my tent, to make a coloured " drawing.

" The wings of this bird, which I meaſured " very exactly, were twelve feet three inches " (Engliſh) from tip to tip. The great fea- " thers, that were of a beautiful ſhining black, " were two feet four inches long. The thick- " neſs of the beak was proportionable to the " reſt of the body; the length about four " inches; the point hooked downwards, and " white at its extremity; and the other part " was of a jet black. A ſhort down, of a brown " colour, covered the head; the eyes were " black, and ſurrounded with a circle of red- " diſh brown. The feathers, on the breaſt, neck

" and

" and wings, were of a light brown; thoſe on " the back were rather darker. Its thighs were " covered with brown feathers to the knee. " The thigh-bone was ten inches long; the leg " five inches: the toes were three before, and " one behind: that behind was an inch and an " half; and the claw with which it was armed " was black, and three quarters of an inch. " The other claws were in the ſame propor- " tion; and the leg was covered with black " ſcales, as alſo the toes; but in theſe the ſcales " were larger.

" Theſe birds uſually keep in the mountains, " where they find their prey: they never deſcend " to the ſea-ſhore, but in the rainy ſeaſon; for " as they are very ſenſible of cold, they go there " for greater warmth. Though theſe moun- " tains are ſituated in the torrid zone, the cold " is often very ſevere; for a great part of the " year they are covered with ſnow, but parti- " cularly in winter.

" The little nouriſhment which theſe birds " find on the ſea-coaſt, except when the tempeſt " drives in ſome great fiſh, obliges the condor " to continue there but a ſhort time. They " uſually come to the coaſt at the approach of " evening; ſtay there all night, and fly back " in the morning."

It is doubted whether this animal be proper to America only, or whether it may not have been

been deſcribed by the naturaliſts of other countries. It is ſuppoſed, that the great bird called the Rock, deſcribed by Arabian writers, and ſo much exaggerated by fable, is but a ſpecies of the condor. The great bird of Tarnaſſar, in the Eaſt Indies, that is larger than the eagle, as well as the vulture of Senegal, that carries off children, are probably no other than the bird we have been deſcribing. Ruſſia, Lapland, and even Switzerland and Germany, are ſaid to have known this animal. A bird of this kind was ſhot in France, that weighed eighteen pounds, and was ſaid to be eighteen feet acroſs the wings: however, one of the quills was deſcribed only as being larger than that of a ſwan; ſo that probably the breadth of the wings may have been exaggerated, ſince a bird ſo large would have the quills more than twice as big as thoſe of a ſwan. However this be, we are not to regret that it is ſcarcely ever ſeen in Europe, as it appears to be one of the moſt formidable enemies of mankind. In the deſerts of Pachomac, where it is chiefly ſeen, men ſeldom venture to travel. Thoſe wild regions are very ſufficient of themſelves to inſpire a ſecret horror; broken precipices — prowling panthers —foreſts only vocal with the hiſſing of ſerpents — and mountains rendered ſtill more terrible by the condor, the only bird that ventures

tures to make its reſidence in thoſe deſerted ſituations.

CHAP. XI.

Of the Vulture, and its Affinities.

THE firſt rank in the deſcription of birds, has been given to the eagle; not becauſe it is ſtronger or larger than the vulture, but becauſe it is more generous and bold. The eagle, unleſs preſſed by famine, will not ſtoop to carrion; and never devours but what he has earned by his own purſuit. The vulture, on the contrary, is indelicately voracious; and ſeldom attacks living animals, when it can be ſupplied with the dead. The eagle meets and ſingly oppoſes his enemy; the vulture, if it expects reſiſtance, calls in the aid of its kind, and baſely overpowers its prey by a cowardly combination. Putrefaction and ſtench, inſtead of deterring, only ſerves to allure them. The vulture ſeems among birds, what the jackall and hyæna are among quadrupedes, who prey upon carcaſſes, and root up the dead.

Vultures may be eaſily diſtinguiſhed from all thoſe of the eagle kind, by the nakedneſs of their heads and necks, which are without feathers, and only covered with a very ſlight down, or a few ſcattered hairs. Their eyes are more prominent;

...e Seve del. J. Taylor sculp.

The King of the Vultures.

prominent; thoſe of the eagle being buried more in the ſocket. Their claws are ſhorter, and leſs hooked. The inſide of the wing is covered with a thick down, which is different in them from all other birds of prey. Their attitude is not ſo upright as that of the eagle; and their flight more difficult and heavy.

In this tribe we may range the golden, the aſh-coloured, and the brown vulture, which are inhabitants of Europe; the ſpotted and the black vulture of Egypt; the bearded vulture, the Braſilian vulture, and the king of the vultures, of South America. They all agree in their nature, being equally indolent, yet rapacious and unclean.

The Golden Vulture ſeems to be the foremoſt of the kind; and is in many things like the golden eagle, but larger in every proportion. From the end of the beak to that of the tail, it is four feet and an half; and to the claws end, forty-five inches. The length of the upper mandible is almoſt ſeven inches; and the tail twenty-ſeven in length. The lower part of the neck, breaſt and belly, are of a red colour; but on the tail it is more faint, and deeper near the head. The feathers are black on the back; and on the wings and tail of a yellowiſh brown. Others of the kind differ from this in colour and dimenſions; but they are all ſtrongly marked by

their naked heads, and beak ſtraight in the beginning, but hooking at the point.

They are ſtill more ſtrongly marked by their nature, which, as has been obſerved, is cruel, unclean, and indolent. Their ſenſe of ſmelling, however, is amazingly great; and Nature, for this purpoſe, has given them two large apertures or noſtrils without, and an extenſive olfactory membrane within. Their inteſtines are formed differently from thoſe of the eagle kind; for they partake more of the formation of ſuch birds as live upon grain. They have both a crop and a ſtomach; which may be regarded as a kind of gizzard, from the extreme thickneſs of the muſcles of which it is compoſed. In fact, they ſeem adapted inwardly, not only for being carnivorous, but to eat corn, or whatſoever of that kind comes in their way.

This bird, which is common in many parts of Europe, and but too well known on the weſtern continent, is totally unknown in England. In Egypt, Arabia, and many other kingdoms of Africa and Aſia, vultures are found in great abundance. The inſide down of their wing is converted into a very warm and comfortable kind of fur, and is commonly ſold in the Aſiatic markets.

Indeed, in Egypt, this bird ſeems to be of ſingular ſervice. There are great flocks of them in the neighbourhood of Grand Cairo, which no

no perſon is permitted to deſtroy. The ſervice they render the inhabitants, is the devouring all the carrion and filth of that great city; which might otherwiſe tend to corrupt and putrify the air. They are commonly ſeen in company with the wild dogs of the country, tearing a carcaſs very deliberately together. This odd aſſociation produces no quarrels; the birds and quadrupedes ſeem to live amicably, and nothing but harmony ſubſiſts between them. The wonder is ſtill the greater, as both are extremely rapacious, and both lean and bony to a very great degree; probably having no great plenty even of the wretched food on which they ſubſiſt.

In America, they lead a life ſomewhat ſimilar. Wherever the hunters, who there only purſue beaſts for the ſkins, are found to go, theſe birds are ſeen to purſue them. They ſtill keep hovering at a little diſtance; and when they ſee the beaſt flayed and abandoned, they call out to each other, pour down upon the carcaſs, and, in an inſtant, pick its bones as bare and clean as if they had been ſcraped by a knife.

At the Cape of Good Hope, in Africa, they ſeem to diſcover a ſtill greater ſhare of dexterity in their methods of carving. "I have," ſays Kolben, "been often a ſpectator of the manner "in which they have anatomized a dead body: "I ſay anatomized, for no artiſt in the world "could have done it more cleanly. They have

" a wonderful method of ſeparating the fleſh " from the bones, and yet leaving the ſkin quite " entire. Upon coming near the carcaſs, one " would not ſuppoſe it thus deprived of its in- " ternal ſubſiſtance, till he began to examine it " more cloſely: he then finds it, literally ſpeak- " ing, nothing but ſkin and bone. Their man- " ner of performing the operation, is this: they " firſt make an opening in the belly of the ani- " mal, from whence they pluck out and greedily " devour the entrails; then entering into the " hollow which they have made, they ſeparate the " fleſh from the bones, without ever touch- " ing the ſkin. It oftens happens that an ox re- " turning home alone to its ſtall from the " plough lies down by the way: it is then, if " the vultures perceive it, that they fall with " fury down, and inevitably devour the unfor- " tunate animal. They ſometimes attempt them " grazing in the fields; and then, to the number " of a hundred or more, make their attack all " at once and together."

" They are attracted by carrion," ſays Cateſ- by, " from a very great diſtance. It is pleaſant " to behold them, when they are thus eating, " and diſputing for their prey. An eagle ge- " nerally preſides at theſe entertainments, and " makes them all keep their diſtance till he has " done. They then fall to with an excellent " appetite: and their ſenſe of ſmelling is ſo ex-

" quiſite,

"quiſite, that the inſtant a carcaſs drops, we "may ſee the vultures floating in the air from "all quarters, and come ſouſing on their "prey." It is ſuppoſed by ſome, that they eat nothing that has life; but this is only when they are not able; for when they can come at lambs, they ſhew no mercy; and ſerpents are their ordinary food. The manner of thoſe birds is to perch themſelves, ſeveral together, on the old pine and cypreſs-trees; where they continue all the morning, for ſeveral hours, with their wings unfolded: nor are they fearful of danger, but ſuffer people to approach them very near, particularly when they are eating.

The ſloth, the filth, and the voraciouſneſs of theſe birds, almoſt exceed credibility. In the Braſils, where they are found in great abundance, when they light upon a carcaſs, which they have liberty to tear at their eaſe, they ſo gorge themſelves, that they are unable to fly; but keep hopping along when they are purſued. At all times, they are a bird of ſlow flight, and unable readily to raiſe themſelves from the ground; but when they have over-fed, they are then utterly helpleſs; but they ſoon get rid of their burthen; for they have a method of vomiting up what they have eaten, and then they fly off with greater facility.

It is pleaſant, however, to be a ſpectator of the hoſtilities between animals that are thus hateful or noxious. Of all creatures, the two

moſt at enmity, is the vulture of Brazil, and the crocodile. The female of this terrible amphibious creature, which in the rivers of that part of the world grows to the ſize of twenty-ſeven feet, lays its eggs, to the number of one or two hundred, in the ſands, on the ſide of the river, where they are hatched by the heat of the climate. For this purpoſe, ſhe takes every precaution to hide from all other animals the place where ſhe depoſits her burthen; in the mean time, a number of vultures, or galinaſſos, as the Spaniards call them, ſit, ſilent and unſeen, in the branches of ſome neighbouring foreſt, and view the crocodile's operations, with the pleaſing expectation of ſucceeding plunder. They patiently wait till the crocodile has laid the whole number of her eggs, till ſhe has covered them carefully under the ſand, and until ſhe is retired from them to a convenient diſtance. Then, all together, encouraging each other with cries, they pour down upon the neſt, hook up the ſand in a moment, lay the eggs bare, and devour the whole brood without remorſe. Wretched as is the fleſh of theſe animals, yet men, perhaps when preſſed by hunger, have been tempted to taſte it. Nothing can be more lean, ſtringy, nauſeous, and unſavory. It is in vain that, when killed, the rump has been cut off; in vain the body has been waſhed, and ſpices uſed to overpower its prevailing

prevailing odour; it ſtill ſmells and taſtes of the carrion by which it was nouriſhed, and ſends forth a ſtench that is inſupportable.

Theſe birds, at leaſt thoſe of Europe, uſually lay two eggs at a time, and produce but once a year. They make their neſts in inacceſſible cliffs, and in places ſo remote that it is rare to find them. Thoſe in our part of the world chiefly reſide in the places where they breed, and ſeldom come down into the plains, except when the ſnow and ice, in their native retreats, has baniſhed all living animals but themſelves; they then come from their heights, and brave the perils they muſt encounter in a more cultivated region. As carrion is not found, at thoſe ſeaſons, in ſufficient quantity, or ſufficiently remote from man to ſuſtain them, they prey upon rabbits, hares, ſerpents, and whatever ſmall game they can overtake or overpower.

Such are the manners of this bird in general; but there is one of the kind, called the King of the Vultures, which, from its extraordinary figure, deſerves a ſeparate deſcription. This bird is a native of America, and not of the Eaſt Indies, as thoſe who make a trade of ſhewing birds would induce us to believe. This bird is larger than a turkey-cock; but is chiefly remarkable for the odd formation of the ſkin of the head and neck, which is bare.

This ſkin ariſes from the baſe of the bill, and is of an orange-colour; from whence it ſtretches on each ſide to the head; from thence it proceeds, like an indented comb, and falls on either ſide, according to the motion of the head. The eyes are ſurrounded by a red ſkin, of a ſcarlet colour; and the iris has the colour and luſtre of pearl. The head and neck are without feathers, covered with a fleſh-coloured ſkin on the upper part, a fine ſcarlet behind the head, and a duſkier coloured ſkin before: farther down behind the head ariſes a little tuft of black down, from whence iſſues and extends beneath the throat, on each ſide, a wrinkled ſkin, of a browniſh colour, mixed with blue, and reddiſh behind: below, upon the naked part of the neck, is a collar formed by ſoft longiſh feathers, of a deep aſh-colour, which ſurround the neck, and cover the breaſt before. Into this collar the bird ſometimes withdraws its whole neck, and ſometimes a part of its head; ſo that it looks as if it had withdrawn the neck into the body. Thoſe marks are ſufficient to diſtinguiſh this bird from all others of the vulture kind; and it cannot be doubted, but that it is the moſt beautiful of all this deformed family: however, neither its habits nor inſtincts vary from the reſt of the tribe; being, like them, a ſlow cowardly bird, living chiefly upon rats, lizards, and ſerpents; and upon carrion

or

or excrement, when it happens in the way. The flesh is so bad, that even savages themselves cannot abide it.

CHAP. XII.

Of the Falcon Kind, and its Affinities.

EVERY creature becomes more important in the history of nature in proportion as it is connected with man. In this view, the smallest vegetable, or the most seemingly contemptible insect, is a subject more deserving attention than the most flourishing tree or the most beautiful of the feathered creation. In this view, the falcon is a more important animal than the eagle or the vulture; and, though so very diminutive in the comparison, is, notwithstanding, from its connexion with our pleasures, a much more interesting object of curiosity.

The amusement of hawking, indeed, is now pretty much given over in this kingdom; for, as every country refines, as its enclosures become higher and closer, those rural sports must consequently decline, in which the game is to be pursued over a long extent of country, and where, while every thing retards the pursuer below, nothing can stop the object of his pursuit above.

Falconry, that is now ſo much diſuſed among us, was the principal amuſement of our anceſtors. A perſon of rank ſcarce ſtirred out without his hawk on his hand; which in old paintings is the criterion of nobility. Harold, afterwards king of England, when he went on a moſt important embaſſy into Normandy, is drawn in an old bas-relief, as embarking with a bird on his fiſt and a dog under his arm. In thoſe days, it was thought ſufficient for noblemen's ſons to wind the horn, and to carry their hawk fair, and leave ſtudy and learning to the children of meaner people. Indeed, this diverſion was in ſuch high eſteem among the great all over Europe, that Frederic, one of the emperors of Germany, thought it not beneath him to write a treatiſe upon hawking.

The expence which attended this ſport was very great: among the old Welch princes, the king's falconer was the fourth officer in the ſtate; but, notwithſtanding all his honours, he was forbid to take more than three draughts of beer from his horn, leſt he ſhould get drunk and neglect his duty. In the reign of James the Firſt, Sir Thomas Monſon is ſaid to have given a thouſand pounds for a caſt of hawks; and ſuch was their value in general, that it was made felony in the reign of Edward the Third to ſteal a hawk. To take its eggs, even in a perſon's

perſon's own ground, was puniſhable with impriſonment for a year and a day, together with a fine at the king's pleaſure. In the reign of Elizabeth, the impriſonment was reduced to three months; but the offender was to lie in priſon till he got ſecurity for his good behaviour for ſeven years farther. In the earlier times, the art of gunning was but little practiſed, and the hawk then was valuable, not only for its affording diverſion, but for its procuring delicacies for the table that could ſeldom be obtained any other way.

Of many of the ancient falcons uſed for this purpoſe, we at this time know only the names, as the exact ſpecies are ſo ill deſcribed, that one may be very eaſily miſtaken for another. Of thoſe in uſe at preſent, both here and in other countries, are the gyr-falcon, the falcon, the lanner, the ſacre, the hobby, the keſtril, and the merlin. Theſe are called the long-winged hawks, to diſtinguiſh them from the goſs-hawk, the ſparrow-hawk, the kite, and the buzzard, that are of ſhorter wing, and either too ſlow, too cowardly, too indolent, or too obſtinate, to be ſerviceable in contributing to the pleaſures of the field.

The generous tribe of hawks, as was ſaid, are diſtinguiſhed from the reſt by the peculiar length of their wings, which reach nearly as low as the tail. In theſe, the firſt quill of the wing

is nearly as long as the ſecond; it terminates in a point, which begins to diminiſh from about an inch of its extremity. This ſufficiently diſtinguiſhes the generous breed from that of the baſer race of kites, ſparrow-hawks, and buzzards, in whom the tail is longer than the wings, and the firſt feather of the wing is rounded at the extremity. They differ alſo in the latter having the fourth feather of the wing the longeſt; in the generous race it is always the ſecond.

This generous race, which have been taken into the ſervice of man, are endowed with natural powers that the other kinds are not poſſeſſed of. From the length of their wings, they are ſwifter to purſue their game; from a confidence in this ſwiftneſs, they are bolder to attack it; and, from an innate generoſity, they have an attachment to their feeder, and conſequently a docility which the baſer birds are ſtrangers to.

The gyr-falcon leads in this bold train. He exceeds all other falcons in the largeneſs of his ſize, for he approaches nearly to the magnitude of the eagle. The top of the head is flat and of an aſh-colour, with a ſtrong, thick, ſhort, and blue beak. The feathers of the back and wings are marked with black ſpots, in the ſhape of an heart; he is a courageous and fierce bird, nor fears even the eagle himſelf; but he chiefly

flies at the ſtork, the heron, and the crane. He is moſtly found in the colder regions of the north, but loſes neither his ſtrength nor his courage when brought into the milder climates.

The falcon, properly ſo called, is the ſecond in magnitude and fame. There are ſome varieties in this bird; but there ſeem to be only two that claim diſtinction; the falcon-gentil and the peregrine-falcon; both are much leſs than the gyr, and ſomewhat about the ſize of a raven. They differ but ſlightly, and perhaps only from the different ſtates they were in when brought into captivity. Thoſe differences are eaſier known by experience than taught by deſcription. The falcon-gentil moults in March, and often ſooner; the peregrine-falcon does not moult till the middle of Auguſt. The peregrine is ſtronger in the ſhoulder, has a larger eye, and yet more ſunk in the head; his beak is ſtronger, his legs longer, and the toes better divided.

Next in ſize to theſe is the lanner, a bird now very little known in Europe; then follows the ſacre, the legs of which are of a bluiſh colour, and ſerve to diſtinguiſh that bird; to them ſucceeds the hobby, uſed for ſmaller game, for daring larks, and ſtooping at quails. The keſtril was trained for the ſame purpoſes; and laſtly the merlin; which, though the ſmalleſt of all the

hawk

hawk or falcon kind, and not much larger than a thruſh, yet diſplays a degree of courage that renders him formidable even to birds ten times his ſize. He has often been known to kill a partridge or a quail at a ſingle pounce from above.

Some of the other ſpecies of ſluggiſh birds were now and then trained to this ſport, but it was when no better could be obtained; but theſe juſt deſcribed were only conſidered as birds of the nobler races. Their courage in general was ſuch, that no bird, not very much above their own ſize, could terrify them; their ſwiftneſs ſo great, that ſcarce any bird could eſcape them; and their docility ſo remarkable, that they obeyed not only the commands, but the ſigns of their maſter. They remained quietly perched upon his hand till their game was ſluſhed, or elſe kept hovering round his head, without ever leaving him but when he gave permiſſion. The common falcon is a bird of ſuch ſpirit, that, like a conqueror in a country, he keeps all birds in awe and in ſubjection to his proweſs. Where he is ſeen flying wild, as I often had an opportunity of obſerving, the birds of every kind, that ſeemed entirely to diſregard the kite or the ſparrow-hawk, fly with ſcreams at his moſt diſtant appearance. Long before I could ſee the falcon, I have ſeen them with the utmoſt ſigns of terror endeavouring to avoid him;

him; and, like the peaſants of a country before a victorious army, every one of them attempting to ſhift for himſelf. Even the young falcons, though their ſpirit be depreſſed by captivity, will, when brought out into the field, venture to fly at barnacles and wild geeſe, till, being ſoundly bruſhed and beaten by thoſe ſtrong birds, they learn their error, and deſiſt from meddling with ſuch unwieldy game for the future.

To train up the hawk to this kind of obedience, ſo as to hunt for his maſter, and bring him the game he ſhall kill, requires no ſmall degree of ſkill and aſſiduity. Numberleſs treatiſes have been written upon this ſubject, which are now, with the ſport itſelf, almoſt utterly forgotten: indeed, except to a few, they ſeem utterly unintelligible; for the falconers had a language peculiar to themſelves, in which they converſed and wrote, and took a kind of profeſſional pride in uſing no other. A modern reader, I ſuppoſe, would be little edified by one of the inſtructions, for inſtance, which we find in Willughby, when he bids us *draw our falcon out of the mew twenty days before we enſeam her. If ſhe truſs and carry, the remedy is, to coſſe her talons, her powſe, and petty ſingle.*

But, as it certainly makes a part of natural hiſtory to ſhew how much the nature of birds can be wrought upon by harſh or kind treatment, I will juſt take leave to give a ſhort account

count of the manner of training an hawk, diveſted of thoſe cant words with which men of art have thought proper to obſcure their profeſſion.

In order to train up a falcon, the maſter begins by clapping ſtraps upon his legs, which are called jeſſes, to which there is faſtened a ring with the owner's name, by which, in caſe he ſhould be loſt, the finder may know where to bring him back. To theſe alſo are added little bells, which ſerve to mark the place where he is, if loſt in the chace. He is always carried on the fiſt, and is obliged to keep without ſleeping. If he be ſtubborn, and attempts to bite, his head is plunged into water. Thus, by hunger, watching, and fatigue, he is conſtrained to ſubmit to having his head covered by a hood or cowl, which covers his eyes. This troubleſome employment continues often for three days and nights without ceaſing. It rarely happens but at the end of this his neceſſities, and the privation of light, make him loſe all idea of liberty, and bring down his natural wildneſs. His maſter judges of his being tamed when he permits his head to be covered without reſiſtance, and when uncovered he ſeizes the meat before him contentedly. The repetition of theſe leſſons by degrees enſures ſucceſs. His wants being the chief principle of his dependance, it is endeavoured to encreaſe his appetite by giving him

him little balls of flannel, which he greedily ſwallows. Having thus excited the appetite, care is taken to ſatisfy it; and thus gratitude attaches the bird to the man who but juſt before had been his tormentor.

When the firſt leſſons have ſucceeded, and the bird ſhews ſigns of docility, he is carried out upon ſome green, the head is uncovered, and, by flattering him with food at different times, he is taught to jump on the fiſt, and to continue there. When confirmed in this habit, it is then thought time to make him acquainted with the lure. This lure is only a thing ſtuffed like the bird the falcon is deſigned to purſue, ſuch as an heron, a pigeon, or a quail, and on this lure they always take care to give him his food. It is quite neceſſary that the bird ſhould not only be acquainted with this, but fond of it, and delicate in his food when ſhewn it. When the falcon has flown upon this, and taſted the firſt morſel, ſome falconers then take it away; but by this there is a danger of daunting the bird; and the ſureſt method is, when he flies to ſeize it to let him feed at large, and this ſerves as a recompence for his docility. The uſe of this lure is to flatter him back when he has flown in the air, which it ſometimes fails to do; and it is always requiſite to aſſiſt it by the voice and the ſigns of the maſter. When theſe leſſons have been long repeated, it is then neceſſary to ſtudy

the

the character of the bird; to ſpeak frequently to him if he be inattentive to the voice; to ſtint in his food ſuch as do not come kindly or readily to the lure; to keep waking him if he be not ſufficiently familiar; and to cover him frequently with the hood if he fears darkneſs. When the familiarity and the docility of the bird are ſufficiently confirmed on the green, he is then carried into the open fields, but ſtill kept faſt by a ſtring which is about twenty yards long. He is then uncovered as before; and the falconer, calling him at ſome paces diſtance, ſhews him the lure. When he flies upon it he is permitted to take a large morſel of the food which is tied to it. The next day the lure is ſhewn him at a greater diſtance, till he comes at laſt to fly to it at the utmoſt length of his ſtring. He is then to be ſhewn the game itſelf alive, but diſabled or tame, which he is deſigned to purſue. After having ſeized this ſeveral times with his ſtring, he is then left entirely at liberty, and carried into the field for the purpoſe of purſuing that which is wild. At that he flies with avidity; and when he has ſeized it, or killed it, he is brought back by the voice and the lure.

By this method of inſtruction, an hawk may be taught to fly at any game whatſoever; but falconers have chiefly confined their purſuit only to ſuch animals as yield them profit by the

the capture, or pleaſure in the purſuit. The hare, the partridge, and the quail, repay the trouble of taking them; but the moſt delightful ſport is the falcon's purſuit of the heron, the kite, or the wood-lark. Inſtead of flying directly forward, as ſome other birds do, theſe, when they ſee themſelves threatened by the approach of the hawk, immediately take to the ſkies. They fly almoſt perpendicularly upward, while their ardent purſuer keeps pace with their flight, and tries to riſe above them. Thus both diminiſh by degrees from the gazing ſpectator below, till they are quite loſt in the clouds; but they are ſoon ſeen deſcending, ſtruggling together, and uſing every effort on both ſides; the one of rapacious inſult, the other of deſperate defence. The unequal combat is ſoon at an end: the falcon comes off victorious, and the other, killed or diſabled, is made a prey either to the bird or the ſportſman.

As for other birds, they are not ſo much purſued, as they generally fly ſtraight forward, by which the ſportſman loſes ſight of the chace, and, what is ſtill worſe, runs a chance of loſing his falcon alſo. The purſuit of the lark by a couple of merlins is conſidered, to him only who regards the ſagacity of the chace, as one of the moſt delightful ſpectacles this exerciſe can afford. The amuſement is, to ſee one of the merlins climbing to get the aſcendant of the

the lark, while the other, lying low for the beſt advantage, waits the ſucceſs of its companion's efforts; thus while the one ſtoops to ſtrike its prey, the other ſeizes it at its coming down.

Such are the natural and acquired habits of theſe birds, which of all others have the greateſt ſtrength and courage relative to their ſize. While the kite or the goſs-hawk approach their prey ſide-ways, theſe dart perpendicularly, in their wild ſtate, upon their game, and devour it on the ſpot, or carry it off, if not too large for their power of flying. They are ſometimes ſeen deſcending perpendicularly from the clouds, from an amazing height, and darting down on their prey with inevitable ſwiftneſs and deſtruction.

The more ignoble race of birds make up by cunning and aſſiduity what theſe claim by force and celerity. Being leſs courageous, they are more patient; and, having leſs ſwiftneſs, they are better ſkilled at taking their prey by ſurprize. The kite, that may be diſtinguiſhed from all the reſt of this tribe by his forky tail and his ſlow floating motion, ſeems almoſt for ever upon the wing. He appears to reſt himſelf upon the boſom of the air, and not to make the ſmalleſt effort in flying. He lives only upon accidental carnage, as almoſt every bird in the air is able to make good his retreat againſt

againſt him. He may be therefore conſidered as an inſidious thief who only prowls about, and, when he finds a ſmall bird wounded, or a young chicken ſtrayed too far from the mother, inſtantly ſeizes the hour of calamity, and, like a famiſhed glutton, is ſure to ſhew no mercy. His hunger, indeed, often urges him to acts of ſeeming deſperation. I have ſeen one of them fly round and round for a while to mark a clutch of chickens, and then on a ſudden dart like lightning upon the unreſiſting little animal, and carry it off, the hen in vain crying out, and the boys hooting and caſting ſtones to ſcare it from its plunder. For this reaſon, of all birds the kite is the good houſewife's greateſt tormentor and averſion.

Of all obſcene birds, the kite is the beſt known; but the buzzard among us is the moſt plenty. He is a ſluggiſh inactive bird, and often remains perched whole days together upon the ſame bough. He is rather an aſſaſſin than a purſuer; and lives more upon frogs, mice, and inſects, which he can eaſily ſeize, than upon birds which he is obliged to follow. He lives in ſummer by robbing the neſts of other birds, and ſucking their eggs, and more reſembles the owl kind in his countenance than any other rapacious bird of day. His figure implies the ſtupidity of his diſpoſition; and ſo little is he capable of inſtruction from man, that it is common

mon to a proverb to call one who cannot be taught, or continues obſtinately ignorant, a buzzard. The honey-buzzard, the moor-buzzard, and the hen-harrier, are all of this ſtupid tribe, and differ chiefly in their ſize, growing leſs in the order I have named them. The goſs-hawk and ſparrow-hawk are what Mr. Willughby calls ſhort-winged birds, and conſequently unfit for training, however injurious they may be to the pigeon-houſe or the ſportſman. They have been indeed taught to fly at game; but little is to be obtained from their efforts, being difficult of inſtruction, and capricious in their obedience. It has been lately aſſerted, however, by one whoſe authority is reſpectable, that the ſparrow-hawk is the boldeſt and the beſt of all others for the pleaſure of the chace.

CHAP. XIII.

The Butcher-Bird.

BEFORE I conclude this ſhort hiſtory of rapacious birds that prey by day, I muſt take leave to deſcribe a tribe of ſmaller birds, that ſeem from their ſize rather to be claſſed with the harmleſs order of the ſparrow-kind; but that from their crooked beak, courage, and appetites for ſlaughter, certainly deſerve a place here.

The leſſer Butcher-Bird is not much above the ſize of a lark; that of the ſmalleſt ſpecies is not ſo big as a ſparrow; yet, diminutive as theſe little animals are, they make themſelves formidable to birds of four times their dimenſions.

The greater Butcher-Bird is about as large as a thruſh; its bill is black, an inch long, and hooked at the end. This mark, together with its carnivorous appetites, ranks it among the rapacious birds; at the ſame time that its legs and feet, which are ſlender, and its toes, formed ſomewhat differently from the former, would ſeem to make it the ſhade between ſuch birds as live wholly upon fleſh, and ſuch as live chiefly upon inſects and grain.

Indeed, its habits ſeem entirely to correſpond with its conformation, as it is found to live as well upon fleſh as upon inſects, and thus to partake in ſome meaſure of a double nature. However, its appetite for fleſh is the moſt prevalent; and it never takes up with the former when it can obtain the latter. This bird, therefore, leads a life of continual combat and oppoſition. As from its ſize it does not much terrify the ſmaller birds of the foreſt, ſo it very frequently meets birds willing to try its ſtrength, and it never declines the engagement.

It is wonderful to ſee with what intrepidity this little creature goes to war with the pie, the crow, and the keſtril, all above four times bigger

ger than itſelf, and that ſometimes prey upon fleſh in the ſame manner. It not only fights upon the defenſive, but often comes to the attack, and always with advantage, particularly when the male and female unite to protect their young, and to drive away the more powerful birds of rapine. At that ſeaſon, they do not wait the approach of their invader; it is ſufficient that they ſee him preparing for the aſſault at a diſtance. It is then that they ſally forth with loud cries, wound him on every ſide, and drive him off with ſuch fury, that he ſeldom ventures to return to the charge. In theſe kinds of diſputes, they generally come off with the victory; though it ſometimes happens that they fall to the ground with the bird they have ſo fiercely fixed upon, and the combat ends with the deſtruction of the aſſailant as well as the defender.

For this reaſon, the moſt redoubtable birds of prey reſpect them; while the kite, the buzzard, and the crow, ſeem rather to fear than ſeek the engagement. Nothing in nature better diſplays the reſpect paid to the claims of courage, than to ſee this little bird, apparently ſo contemptible, fly in company with the lanner, the falcon, and all the tyrants of the air, without fearing their power, or avoiding their reſentment.

As for ſmall birds, they are its uſual food.

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It ſeizes them by the throat, and ſtrangles them in an inſtant. When it has thus killed the bird or inſect, it is aſſerted by the beſt authority, that it fixes them upon ſome neighbouring thorn, and, when thus ſpitted, pulls them to pieces with its bill. It is ſuppoſed that as Nature has not given this bird ſtrength ſufficient to tear its prey to pieces with its feet, as the hawks do, it is obliged to have recourſe to this extraordinary expedient.

During ſummer, ſuch of them as conſtantly reſide here, for the ſmaller red butcher-bird migrates, remain among the mountainous parts of the country; but in winter they deſcend into the plains, and nearer human habitations. The larger kind make their neſts on the higheſt trees, while the leſſer build in buſhes in the fields and hedge-rows. They both lay about ſix eggs, of a white colour, but encircled at the bigger end with a ring of browniſh red. The neſt on the outſide is compoſed of white moſs, interwoven with long graſs; within, it is well lined with wool, and is uſually fixed among the forking branches of a tree. The female feeds her young with caterpillars and other inſects while very young; but ſoon after accuſtoms them to fleſh, which the male procures with ſurpriſing induſtry. Their nature alſo is very different from other birds of prey in their parental care; for, ſo far from driving out their young from the neſt to

ſhift for themſelves, they keep them with care; and even when adult they do not forſake them, but the whole brood live in one family together. Each family lives apart, and is generally compoſed of the male, female, and five or ſix young ones; theſe all maintain peace and ſubordination among each other, and hunt in concert. Upon the returning ſeaſon of courtſhip this union is at an end, the family parts for ever, each to eſtabliſh a little houſhold of its own. It is eaſy to diſtinguiſh theſe birds at a diſtance, not only from their going in companies, but alſo from their manner of flying, which is always up and down, ſeldom direct or ſide-ways.

Of theſe birds there are three or four different kinds; but the greater aſh-coloured butcher-bird is the leaſt known among us. The red-backed butcher-bird migrates in autumn, and does not return till ſpring. The woodchat reſembles the former, except in the colour of the back, which is brown, and not red as in the other. There is ſtill another, leſs than either of the former, found in the marſhes near London. This too is a bird of prey, although not much bigger than a tit-mouſe; an evident proof that an animal's courage or rapacity does not depend upon its ſize. Of foreign birds of this kind there are ſeveral; but as we know little of their manner of living, we will not, inſtead of hiſtory, ſubſtitute mere deſcription. In fact, the colours

lours of a bird, which is all we know of them, would afford a reader but ſmall entertainment in the enumeration. Nothing can be more eaſy than to fill volumes with the different ſhades of a bird's plumage; but theſe accounts are written with more pleaſure than they are read; and a ſingle glance of a good plate or a picture imprints a juſter idea than a volume could convey.

CHAP. XIV.

Of Rapacious Birds of the Owl Kind, that prey by Night.

HITHERTO we have been deſcribing a tribe of animals who, though plunderers among their fellows of the air, yet wage war boldly in the face of day. We now come to a race equally cruel and rapacious; but who add to their ſavage diſpoſition, the further reproach of treachery, and carry on all their depredations by night.

All birds of the owl kind may be conſidered as nocturnal robbers, who, unfitted for taking their prey while it is light, ſurpriſe it at thoſe hours of reſt when the tribes of Nature are in the leaſt expectation of an enemy. Thus there ſeems no link in Nature's chain broken; no where a dead inactive repoſe; but every place,

every ſeaſon, every hour of the day and night, is buſtling with life, and furniſhing inſtances of induſtry, ſelf-defence, and invaſion.

All birds of the owl kind have one common mark, by which they are diſtinguiſhed from others; their eyes are formed for ſeeing better in the duſk, than in the broad glare of ſun-ſhine. As in the eyes of tigers and cats, that are formed for a life of nocturnal depredation, there is a quality in the retina that takes in the rays of light ſo copiouſly as to permit their ſeeing in places almoſt quite dark; ſo in theſe birds there is the ſame conformation of that organ, and though, like us, they cannot ſee in a total excluſion of light, yet they are ſufficiently quick-ſighted, at times when we remain in total obſcurity. In the eyes of all animals Nature hath made a complete proviſion, either to ſhut out too much light, or to admit a ſufficiency, by the contraction and dilatation of the pupil. In theſe birds the pupil is capable of opening very wide, or ſhutting very cloſe: by contracting the pupil, the brighter light of the day, which would act too powerfully upon the ſenſibility of the retina, is excluded; by dilating the pupil, the animal takes in the more faint rays of the night, and thereby is enabled to ſpy its prey, and catch it with greater facility in the dark. Beſide this, there is an irradiation on the back of the eye, and the very iris itſelf has a faculty

of reflecting the rays of light, ſo as to aſſiſt viſion in the gloomy places where theſe birds are found to frequent.

But though owls are dazzled by too bright a day-light, yet they do not ſee beſt in the darkeſt nights, as ſome have been apt to imagine, or that in the duſk of the evening they are beſt fitted for ſeeing; at thoſe ſeaſons when there is neither too much light, nor too little. It is then that they iſſue from their retreats, to hunt or to ſurpriſe their prey, which is uſually attended with great ſucceſs: it is then that they find all other birds aſleep, or preparing for repoſe, and they have only to ſeize the moſt unguarded.

The nights when the moon ſhines are the times of their moſt ſucceſsful plunder; for when it is wholly dark, they are leſs qualified for ſeeing and purſuing their prey: except, therefore, by moonlight, they contract the hours of their chace; and if they come out at the approach of duſk in the evening, they return before it is totally dark, and then riſe by twilight the next morning, to purſue their game, and to return, in like manner, before the broad day-light begins to dazzle them with its ſplendor.

Yet the faculty of ſeeing in the night, or of being entirely dazzled by day, is not alike in every ſpecies of theſe nocturnal birds: ſome ſee by night better than others; and ſome are ſo

little dazzled by day-light, that they perceive their enemies and avoid them. The common white or barn owl, for inſtance, ſees with ſuch exquiſite acuteneſs in the dark, that though the barn has been ſhut at night, and the light mouſe that peeps from it perceives the ſmalleſt the brown horn owl is often ſeen to prowl along the hedges by day, like the ſparrow-hawk; and ſometimes with good ſucceſs.

All birds of the owl kind may be divided into two ſorts; thoſe that have horns, and thoſe without. Theſe horns are nothing more than two or three feathers that ſtand up on each ſide of the head over the ear, and give this animal a kind of horned appearance. Of the horned kind is, the great horned owl, which at firſt view appears as large as an eagle. When he comes to be obſerved more cloſely, however, he will be found much leſs. His legs, body, wings and tail, are ſhorter; his head much larger and thicker: his horns are compoſed of feathers, that riſe above two inches and an half high, and which he can erect or depreſs at pleaſure: his eyes are large and tranſparent, encircled with an orange-coloured iris: his ears are large and deep, and it would appear that no animal was poſſeſſed with a more exquiſite ſenſe of hearing: his plumage is of a reddiſh brown, marked

marked on the back with black and yellow ſpots, and yellow only upon the belly.

Next to this is the common horned owl, of a much ſmaller ſize than the former, and with horns much ſhorter. As the great owl was five feet from the tip of one wing to the other, this is but three. The horns are but about an inch long, and conſiſt of ſix feathers, variegated with black and yellow.

There is ſtill a ſmaller kind of the horned owl, which is not much larger than a blackbird; and whoſe horns are remarkably ſhort, being compoſed but of one feather, and that not above half an inch high.

To theſe ſucceeds the tribe without horns. The howlet, which is the largeſt of this kind, with duſky plumes, and black eyes; the ſcreech-owl, of a ſmaller ſize, with blue eyes, and plumage of an iron grey; the white owl, about as large as the former, with yellow eyes and whitiſh plumage; the great brown owl, leſs than the former, with brown plumage and a brown beak; and laſtly, the little brown owl, with yellowiſh-coloured eyes, and an orange-coloured bill. To this catalogue might be added others of foreign denominations, which differ but little from our own, if we except the harfang, or Great Hudſon's Bay owl of Edwards, which is the largeſt of all the nocturnal tribe, and as white as the ſnows of the country of which he is a native.

All this tribe of animals, however they may differ in their ſize and plumage, agree in their general characteriſtics of preying by night, and having their eyes formed for nocturnal viſion. Their bodies are ſtrong and muſcular; their feet and claws made for tearing their prey; and their ſtomachs for digeſting it. It muſt be remarked, however, that the digeſtion of all birds that live upon mice, lizards, or ſuch like food, is not very perfect; for though they ſwallow them whole, yet they are always ſeen ſome time after to diſgorge the ſkin and bones, rolled up in a pellet, as being indigeſtible.

In proportion as each of theſe animals bears the day-light beſt, he ſets forward earlier in the evening in purſuit of his prey. The great horned owl is the foremoſt in leaving his retreat; and ventures into the woods and thickets very ſoon in the evening. The horned, and the brown owl, are later in their excurſions: but the barn owl ſeems to ſee beſt in profound darkneſs; and ſeldom leaves his hiding-place till midnight.

As they are incapable of ſupporting the light of the day, or at leaſt of then ſeeing and readily avoiding their danger, they keep all this time concealed in ſome obſcure retreat, ſuited to their gloomy appetites, and there continue in ſolitude and ſilence. The cavern of a rock, the darkeſt part of an hollow tree, the battlements of a ruined and unfrequented caſtle, ſome obſcure hole

hole in a farmer's out-houſe, are the places where they are uſually found: if they be ſeen out of theſe retreats in the day-time, they may be conſidered as having loſt their way; as having by ſome accident been thrown into the midſt of their enemies, and ſurrounded with danger.

Having ſpent the day in their retreat, at the approach of evening they ſally forth, and ſkim rapidly up and down along the hedges. The barn-owl indeed, who lives chiefly upon mice, is contented to be more ſtationary: he takes his reſidence upon ſome ſhock of corn, or the point of ſome old houſe; and there watches in the dark, with the utmoſt perſpicacity and perſeverance.

Nor are theſe birds by any means ſilent; they all have an hideous note; which, while purſuing their prey, is ſeldom heard; but may be conſidered rather as a call to courtſhip. There is ſomething always terrifying in this call, which is often heard in the ſilence of midnight, and breaks the general pauſe with an horrid variation. It is different in all; but in each it is alarming and diſagreeable. Father Kircher, who has ſet the voices of birds to muſic, has given all the tones of the owl note, which makes a moſt tremendous melody. Indeed, the prejudices of mankind are united with their ſenſations to make the cry of the owl diſagreeable. The ſcreech-owl's voice was always

conſidered among the people, as a preſage of ſome ſad calamity that was ſoon to enſue.

They ſeldom, however, are heard while they are preying; that important purſuit is always attended with ſilence, as it is by no means their intention to diſturb or forewarn thoſe little animals they wiſh to ſurpriſe. When their purſuit has been ſucceſsful, they ſoon return to their ſolitude, or to their young, if that be the ſeaſon. If, however, they find but little game, they continue their queſt ſtill longer; and it ſometimes happens that, obeying the dictates of appetite rather than of prudence, they purſue ſo long that broad day breaks in upon them, and leaves them dazzled, bewildered, and at a diſtance from home.

In this diſtreſs they are obliged to take ſhelter in the firſt tree or hedge that offers, there to continue concealed all day, till the returning darkneſs once more ſupplies them with a better plan of the country. But it too often happens that, with all their precaution to conceal themſelves, they are ſpied out by the other birds of the place, and are ſure to receive no mercy. The black-bird, the thruſh, the jay, the bunting, and the red-breaſt, all come in file, and employ their little arts of inſult and abuſe. The ſmalleſt, the feebleſt, and the moſt contemptible of this unfortunate bird's enemies, are then the foremoſt to injure and torment him. They encreaſe

encreaſe their cries and turbulence round him, flap him with their wings, and are ready to ſhew their courage to be great, as they are ſenſible that their danger is but ſmall. The unfortunate owl, not knowing where to attack or where to fly, patiently ſits and ſuffers all their inſults. Aſtoniſhed and dizzy, he only replies to their mockeries by aukward and ridiculous geſtures, by turning his head, and rolling his eyes with an air of ſtupidity. It is enough that an owl appears by day to ſet the whole grove into a kind of uproar. Either the averſion all the ſmall birds have to this animal, or the conſciouſneſs of their own ſecurity, makes them purſue him without ceaſing, while they encourage each other by their mutual cries to lend aſſiſtance in this laudable undertaking.

It ſometimes happens, however, that the little birds purſue their inſults with the ſame imprudent zeal with which the owl himſelf had purſued his depredations. They hunt him the whole day until evening returns; which reſtoring him his faculties of ſight once more, he makes the foremoſt of his purſuers pay dear for their former ſport: nor is man always an unconcerned ſpectator here. The bird-catchers have got an art of counterfeiting the cry of the owl exactly; and, having before limed the branches of an hedge, they ſit unſeen and give the call. At this, all the little birds flock to the place

where they expect to find their well-known enemy; but inſtead of finding their ſtupid antagoniſt, they are ſtuck faſt to the hedge themſelves. This ſport muſt be put in practice an hour before night-fall, in order to be ſucceſsful; for if it is put off till later, thoſe birds which but a few minutes ſooner came to provoke their enemy, will then fly from him with as much terror as they juſt before ſhewed inſolence.

It is not unpleaſant to ſee one ſtupid bird made in ſome ſort a decoy to deceive another. The great horned owl is ſometimes made uſe of for this purpoſe, to lure the kite, when falconers deſire to catch him for the purpoſes of training the falcon. Upon this occaſion they clap the tail of a fox to the great owl, to render his figure extraordinary; in which trim he ſails ſlowly along, flying low, which is his uſual manner. The kite, either curious to obſerve this odd kind of animal, or perhaps inquiſitive to ſee whether it may not be proper for food, flies after, and comes nearer and nearer. In this manner he continues to hover, and ſometimes to deſcend, till the falconer ſetting a ſtrong-winged hawk againſt him, ſeizes him for the purpoſe of training his young ones at home.

The uſual place where the great horned owl breeds is in the cavern of a rock, the hollow of a tree, or the turret of ſome ruined caſtle. Its neſt

neſt is near three feet in diameter, and compoſed of ſticks, bound together by the fibrous roots of trees, and lined with leaves on the inſide. It lays about three eggs, which are larger than thoſe of a hen, and of a colour ſomewhat reſembling the bird itſelf. The young ones are very voracious, and the parents not leſs expert at ſatisfying the call of hunger. The leſſer owl of this kind never makes a neſt for itſelf, but always takes up with the old neſt of ſome other bird, which it has often been forced to abandon. It lays four or five eggs; and the young are all white at firſt, but change colour in about a fortnight. The other owls in general build near the place where they chiefly prey; that which feeds upon birds in ſome neighbouring grove; that which preys chiefly upon mice near ſome farmer's yard, where the proprietor of the place takes care to give it perfect ſecurity. In fact, whatever miſchief one ſpecies of owl may do in the woods, the barn-owl makes a ſufficient recompence for, by being equally active in deſtroying mice nearer home; ſo that a ſingle owl is ſaid to be more ſerviceable than half a dozen cats in ridding the barn of its domeſtic vermin. "In the year 1580," ſays an old writer, "at Hallontide, an army of mice "ſo over-run the marſhes near Southminſter, "that they eat up the graſs to the very roots. "But at length a great number of ſtrange

"painted

" painted owls came and devoured all the mice. " The like happened again in Eſſex about ſixty " years after."

To conclude our account of theſe birds, they are all very ſhy of man, and extremely indocile and difficult to be tamed. The white owl in particular, as Mr. Buffon aſſerts, cannot be made to live in captivity; I ſuppoſe he means if it be taken when old. " They live," ſays he, " ten or twelve days in the aviary where they " are ſhut up; but they refuſe all kind of nou- " riſhment, and at laſt die of hunger. By day " they remain without moving upon the floor " of the aviary; in the evening, they mount " on the higheſt perch, where they continue " to make a noiſe like a man ſnoring with his " mouth open. This ſeems deſigned as a call " for their old companions without; and, in " fact, I have ſeen ſeveral others come to the " call, and perch upon the roof of the aviary, " where they made the ſame kind of hiſſing, " and ſoon after permitted themſelves to be " taken in a net."

OF

BIRDS.

OF THE

POULTRY KIND.

PART II.

CHAP. I.

Of Birds of the Poultry Kind.

FROM the moſt rapacious and noxious tribe of birds we make a tranſition to thoſe which of all others are the moſt harmleſs and the moſt ſerviceable to man. He may force the rapacious tribes to aſſiſt his pleaſures in the field, or induce the ſmaller warblers to delight him with their ſinging; but it is from the poultry kind that he derives the moſt ſolid advantages, as they not only make a conſiderable addition to the neceſſaries of life, but furniſh out the greateſt delicacies to every entertainment.

Almoſt, if not all, the domeſtic birds of the poultry kind that we maintain in our yards are of foreign extraction; but there are others to be ranked in this claſs that are as yet in a ſtate of nature; and perhaps only wait till they become ſufficiently ſcarce to be taken under the care of man, to multiply their propagation. It will appear remarkable enough, if we conſider how much the tame poultry which we have imported from diſtant climates has encreaſed, and how much thoſe wild birds of the poultry kind that have never yet been taken into keeping have been diminiſhed and deſtroyed.

ſtroyed. They are all thinned; and many of the ſpecies, eſpecially in the more cultivated and populous parts of the kingdom, are utterly unſeen.

Under birds of the poultry kind I rank all thoſe that have white fleſh, and, comparatively to their head and limbs, have bulky bodies. They are furniſhed with ſhort ſtrong bills for picking up grain, which is their chief and often their only ſuſtenance. Their wings are ſhort [illegible] for which reaſon they are not able to fly far. They lay a great many eggs, and, as they lead their young abroad the very day they are hatched, in queſt of food, which they are ſhewn by the mother, and which they pick up for themſelves, they generally make their neſts on the ground. The toes of all theſe are united by a membrane as far as the firſt articulation, and then are divided as in thoſe of the former claſs.

Under this claſs we may therefore rank the common cock, the peacock, the turkey, the pintada or Guinea-hen, the pheaſant, the buſtard, the grous, the partridge, and the quail. Theſe all bear a ſtrong ſimilitude to each other, being equally granivorous, fleſhy, and delicate to the palate. Theſe are among birds what beaſts of paſture are among quadrupedes, peaceable tenants of the field, and ſhunning the thicker part of the foreſt, that abounds with numerous

numerous animals who carry on unceaſing hoſtilities againſt them.

As Nature has formed the rapacious claſs for war, ſo ſhe ſeems equally to have fitted theſe for peace, reſt, and ſociety. Their wings are but ſhort, ſo that they are ill-formed for wandering from one region to another; their bills oppoſers short, and incapable of annoying their their toes are made for ſcratching up their food, and not for holding or tearing it. Theſe are ſufficient indications of their harmleſs nature; while their bodies, which are fat and fleſhy, render them unwieldy travellers, and incapable of ſtraying far from each other.

Accordingly we find them chiefly in ſociety; they live together; and though they may have their diſputes, like all other animals, upon ſome occaſions; yet, when kept in the ſame diſtrict, or fed in the ſame yard, they learn the arts of ſubordination; and, in proportion as each knows his ſtrength, he ſeldom tries a ſecond time the combat where he has once been worſted.

In this manner, all of this kind ſeem to lead an indolent voluptuous life: as they are furniſhed internally with a very ſtrong ſtomach, commonly called a gizzard, ſo their voraciouſneſs ſcarce knows any bounds. If kept in cloſe captivity, and ſeparated from all their former companions, they ſtill have the pleaſure of eating

ing left; and they ſoon grow fat and unwieldy in their priſon. To ſay this more ſimply, many of the wilder ſpecies of birds, when cooped or caged, pine away, grow gloomy, and ſome refuſe all ſuſtenance whatever; none, except thoſe of the poultry kind, grow fat, who ſeem to loſe all remembrance of their former liberty, ſatisfied with indolence and plenty.

The poultry kind governed by their appetites. The indulgence of theſe ſeems to influence their other habits, and deſtroys among them that connubial fidelity for which moſt other kinds are remarkable. The eagle and the falcon, how fierce ſoever to other animals, are yet gentle and true to each other; their connexions when once formed continue till death; and the male and female in every exigence and every duty lend faithful aſſiſtance to each other. They aſſiſt each other in the production of their young, in providing for them when produced; and even then, though they drive them forth to fight their own battles, yet the old ones ſtill retain their former affection to each other, and ſeldom part far aſunder.

But it is very different with this luxurious claſs I am now deſcribing. Their courtſhip is but ſhort, and their congreſs fortuitous. The male takes no heed of his offſpring; and, ſatisfied with the pleaſure of getting, leaves to the

the female all the care of providing for poſterity. Wild and irregular in his appetites, he ranges from one to another; and claims every female which he is ſtrong enough to keep from his fellows. Though timorous when oppoſed to birds of prey, yet he is incredibly bold among thoſe of his own kind; and but to ſee a male of his own ſpecies is ſufficient to produce a combat. As his deſires extend to all, every creature becomes his enemy that pretends to be his rival.

The female, equally without fidelity or attachment, yields to the moſt powerful. She ſtands by, a quiet meretricious ſpectator of their fury, ready to reward the conqueror with every compliance. She takes upon herſelf all the labour of hatching and bringing up her young, and chuſes a place for hatching as remote as poſſible from the cock. Indeed, ſhe gives herſelf very little trouble in making a neſt, as her young ones are to forſake it the inſtant they part from the ſhell.

She is equally unaſſiſted in providing for her young, that are not fed with meat put into their mouths, as in other claſſes of the feathered kind, but peck their food, and, forſaking their neſts, run here and there, following the parent wherever it is to be found. She leads them forward where they are likely to have the greateſt quantity of grain, and takes care to ſhew by pecking

pecking, the ſort proper for them to ſeek for. Though at other times voracious, ſhe is then abſtemious to an extreme degree; and, intent only on providing for and ſhewing her young clutch their food, ſhe ſcarce takes any nouriſhment herſelf. Her parental pride ſeems to overpower every other appetite; but that decreaſes in proportion as her young ones are more able to provide for themſelves, and then all her voracious habits return.

Among the other habits peculiar to this claſs of birds is that of duſting themſelves. They lie flat in ſome duſty place, and with their wings and feet raiſe and ſcatter the duſt over their whole body. What may be their reaſon for thus doing, it is not eaſy to explain. Perhaps the heat of their bodies is ſuch, that they require this powder to be interpoſed between their feathers to keep them from lying too cloſe together, and thus encreaſing that heat with which they are incommoded.

CHAP.

CHAP. II.

Of the Cock.

ALL birds taken under the protection of man loſe a part of their natural figure, and are altered not only in their habits but their very form. Climate, food, and captivity, are three very powerful agents in producing theſe alterations; and thoſe birds that have longeſt felt their influence under human direction, are the moſt likely to have the greateſt variety in their figures, their plumage, and their diſpoſitions.

Of all other birds, the Cock ſeems to be the oldeſt companion of mankind, to have been firſt reclaimed from the foreſt, and taken to ſupply the accidental failure of the luxuries or neceſſities of life. As he is thus longeſt under the care of man, ſo of all others perhaps he exhibits the greateſt number of varieties, there being ſcarce two birds of this ſpecies that exactly reſemble each other in plumage and form. The tail, which makes ſuch a beautiful figure in the generality of theſe birds, is yet found entirely wanting in others; and not only the tail but the rump alſo. The toes, which are uſually four in all animals of the poultry kind, yet in a ſpecies

a ſpecies of the cock are found to amount to five. The feathers, which lie ſo ſleek and in ſuch beautiful order in moſt of thoſe we are acquainted with, are in a peculiar breed all inverted, and ſtand ſtaring the wrong way. Nay, there is a ſpecies that comes from Japan, which inſtead of feathers ſeems to be covered over with hair. Theſe and many other varieties are to be found in this animal, which ſeem to be the marks this early priſoner bears of his long captivity.

It is not well aſcertained when the cock was firſt made domeſtic in Europe; but it is generally agreed that we firſt had him in our weſtern world from the kingdom of Perſia. Ariſtophanes calls the cock the Perſian bird, and tells us he enjoyed that kingdom before ſome of its earlieſt monarchs. This animal was in fact known ſo early even in the moſt ſavage parts of Europe, that we are told the cock was one of the forbidden foods among the ancient Britons. Indeed, the domeſtic fowl ſeems to have baniſhed the wild one. Perſia itſelf, that firſt introduced it to our acquaintance, ſeems no longer to know it in its natural form; and if we did not find it wild in ſome of the woods of India, as well as thoſe of the iſlands in the Indian Ocean, we might begin to doubt, as we do with regard to the ſheep, in what form it firſt exiſted in a ſtate of nature.

But

But thoſe doubts no longer exiſt: the cock is found in the iſland of Tinian, in many others of the Indian Ocean, and in the woods on the coaſts of Malabar, in his ancient ſtate of independence. In his wild condition, his plumage is black and yellow, and his comb and wattles yellow and purple. There is another peculiarity alſo in thoſe of the Indian woods; their bones, which when boiled with us are white, as every body knows, in thoſe are as black as ebony. Whether this tincture proceeds from their food, as the bones are tinctured red by feeding upon madder, I leave to the diſcuſſion of others: ſatisfied with the fact, let us decline ſpeculation.

In their firſt propagation in Europe, there were diſtinctions then that now ſubſiſt no longer. The ancients eſteemed thoſe fowls whoſe plumage was reddiſh as invaluable; but as for the white it was conſidered as utterly unfit for domeſtic purpoſes. Theſe they regarded as ſubject to become a prey to rapacious birds; and Ariſtotle thinks them leſs fruitful than the former. Indeed, his diviſion of thoſe birds ſeems taken from their culinary uſes; the one ſort he calls generous and noble, being remarkable for fecundity; the other ſort, ignoble and uſeleſs, from their ſterility. Theſe diſtinctions differ widely from our modern notions of generoſity in this animal; that which we call the game-cock

being by no means ſo fruitful as the ungenerous dunghill-cock, which we treat with contempt. The Athenians had their cock-matches as well as we; but it is probable they did not enter into our refinement of chuſing out the moſt barren of the ſpecies for the purpoſes of combat.

However this be, no animal in the world has greater courage than the cock when oppoſed to one of his own ſpecies; and in every part of the world where refinement and poliſhed manners have not entirely taken place, cock-fighting is a principal diverſion. In China, India, the Philipine Iſlands, and all over the eaſt, cock-fighting is the ſport and amuſement even of kings and princes. With us it is declining every day; and it is to be hoped it will in time become only the paſtime of the loweſt vulgar. It is the opinion of many that we have a bolder and more valiant breed than is to be found elſewhere; and ſome, indeed, have entered into a ſerious diſcuſſion upon the cauſe of ſo flattering a ſingularity. But the truth is, they have cocks in China as bold, if not bolder, than ours; and, what would ſtill be conſidered as valuable among cockers here, they have more ſtrength with leſs weight. Indeed, I have often wondered why men who lay two or three hundred pounds upon the proweſs of a ſingle cock, have not taken every method to improve the breed.

Nothing, it is probable, could do this more effectually than by croſſing the ſtrain, as it is called, by a foreign mixture; and whether having recourſe even to the wild cock in the foreſts of India would not be uſeful, I leave to their conſideration. However, it is a mean and ungenerous amuſement, nor would I wiſh much to promote it. The truth is, I could give ſuch inſtructions with regard to cock-fighting, and could ſo arm one of theſe animals againſt the other, that it would be almoſt impoſſible for the adverſary's cock to ſurvive the firſt or ſecond blow; but, as Boerhaave has ſaid upon a former occaſion, when he was treating upon poiſons, "to teach the arts of cruelty is equivalent to "committing them."

This extraordinary courage in the cock is thought to proceed from his being the moſt ſalacious of all other birds whatſoever. A ſingle cock ſuffices for ten or a dozen hens; and it is ſaid of him that he is the only animal whoſe ſpirits are not abated by indulgence. But then he ſoon grows old; the radical moiſture is exhauſted; and in three or four years he becomes utterly unfit for the purpoſes of impregnation. "Hens alſo," to uſe the words of Willughby, "as they for the greateſt part of the year daily "lay eggs, cannot ſuffice for ſo many births, but "for the moſt part after three years become "effete and barren: for when they have ex-

" hauſted all their ſeed-eggs, of which they had " but a certain quantity from the beginning, " they muſt neceſſarily ceaſe to lay, there being " no new ones generated within."

The hen ſeldom clutches a brood of chickens above once a ſeaſon, though inſtances have been known in which they produced two. The number of eggs a domeſtic hen will lay in the year are above two hundred, provided ſhe be well fed, and ſupplied with water and liberty. It matters not much whether ſhe be trodden by the cock or no; ſhe will continue to lay, although all the eggs of this kind can never by hatching be brought to produce a living animal. Her neſt is made without any care, if left to herſelf; a hole ſcratched into the ground, among a few buſhes, is the only preparation ſhe makes for this ſeaſon of patient expectation. Nature, almoſt exhauſted by its own fecundity, ſeems to inform her of the proper time for hatching, which ſhe herſelf teſtifies by a clucking note, and by diſcontinuing to lay. The good houſewives, who often get more by their hens laying than by their chickens, artificially protract this clucking ſeaſon, and ſometimes entirely remove it. As ſoon as their hen begins to cluck, they ſtint her in her proviſions; and, if that fails, they plunge her into cold water; this, for the time, effectually puts back her hatching; but then

then it often kills the poor bird, who takes cold and dies under the operation.

If left entirely to herſelf, the hen would ſeldom lay above twenty eggs in the ſame neſt, without attempting to hatch them: but in proportion as ſhe lays, her eggs are removed; and ſhe continues to lay, vainly hoping to encreaſe the number. In the wild ſtate, the hen ſeldom lays above fifteen eggs; but then her proviſion is more difficultly obtained, and ſhe is perhaps ſenſible of the difficulty of maintaining too numerous a family.

When the hen begins to ſit, nothing can exceed her perſeverance and patience; ſhe continues for ſome days immoveable; and when forced away by the importunities of hunger, ſhe quickly returns. Sometimes alſo her eggs become too hot for her to bear, eſpecially if ſhe be furniſhed with too warm a neſt within doors, for then ſhe is obliged to leave them to cool a little: thus the warmth of the neſt only retards incubation, and often puts the brood a day or two back in the ſhell. While the hen ſits, ſhe carefully turns her eggs, and even removes them to different ſituations; till at length, in about three weeks, the young brood begin to give ſigns of a deſire to burſt their confinement. When by the repeated efforts of their bill, which ſerves like a pioneer on this occaſion, they have broke themſelves a paſſage through the ſhell,

the hen ſtill continues to ſit till all are excluded. The ſtrongeſt and beſt chickens generally are the firſt candidates for liberty; the weakeſt come behind, and ſome even die in the ſhell. When all are produced, ſhe then leads them forth to provide for themſelves. Her affection and her pride ſeem then to alter her very nature, and correct her imperfections. No longer voracious or cowardly, ſhe abſtains from all food that her young can ſwallow, and flies boldly at every creature that ſhe thinks is likely to do them miſchief. Whatever the invading animal be, ſhe boldly attacks him; the horſe, the hog, or the maſtiff. When marching at the head of her little troop, ſhe acts the commander, and has a variety of notes to call her numerous train to their food, or to warn them of approaching danger. Upon one of theſe occaſions, I have ſeen the whole brood run for ſecurity into the thickeſt part of an hedge, when the hen herſelf ventured boldly forth, and faced a fox that came for plunder. With a good maſtiff, however, we ſoon ſent the invader back to his retreat; but not before he had wounded the hen in ſeveral places.

Ten or twelve chickens are the greateſt number that a good hen can rear and clutch at a time; but as this bears no proportion to the number of her eggs, ſchemes have been imagined to clutch all the eggs of an hen, and thus

turn

turn her produce to the greateſt advantage. By theſe contrivances it has been obtained that an hen, that ordinarily produces but twelve chickens in the year, is found to produce as many chickens as eggs, and conſequently often above two hundred. The contrivance I mean is the artificial method of hatching chickens in ſtoves, as is practiſed at Grand Cairo; or in a chymical elaboratory properly graduated, as has been effected by Mr. Reaumur. At Grand Cairo they thus produce ſix or ſeven thouſand chickens at a time; where, as they are brought forth in their mild ſpring, which is warmer than our ſummer, the young ones thrive without clutching. But it is otherwiſe in our colder and unequal climate; the little animal may, without much difficulty, be hatched from the ſhell; but they almoſt all periſh when excluded. To remedy this, Reaumur has made uſe of a woollen hen, as he calls it; which was nothing more than putting the young ones in a warm baſket, and clapping over them a thick woollen canopy. I ſhould think a much better ſubſtitute might be found; and this from among the ſpecies themſelves. Capons may very eaſily be taught to clutch a freſh brood of chickens throughout the year; ſo that when one little colony is thus reared, another may be brought to ſucceed it. Nothing is more common than to ſee capons thus employed; and the manner of teaching

them is this: firſt the capon is made very tame, ſo as to feed from one's hand; then, about evening, they pluck the feathers off his breaſt, and rub the bare ſkin with nettles; they then put the chickens to him, which preſently run under his breaſt and belly, and probably rubbing his bare ſkin gently with their heads, allay the ſtinging pain which the nettles had juſt produced. This is repeated for two or three nights, till the animal takes an affection to the chickens that have thus given him relief, and continues to give them the protection they ſeek for: perhaps alſo the querulous voice of the chickens may be pleaſant to him in miſery, and invite him to ſuccour the diſtreſt. He from that time brings up a brood of chickens like a hen, clutching them, feeding them, clucking, and performing all the functions of the tendereſt parent. A capon once accuſtomed to this ſervice, will not give over; but when one brood is grown up, he may have another nearly hatched put under him, which he will treat with the ſame tenderneſs he did the former.

The cock, from his ſalaciouſneſs, is allowed to be a ſhort-lived animal; but how long theſe birds live, if left to themſelves, is not yet well aſcertained by any hiſtorian. As they are kept only for profit, and in a few years become unfit for generation, there are few that, from mere motives of curioſity, will make the tedious experiment

periment of maintaining a proper number till they die. Aldrovandus hints their age to be ten years; and it is probable that this may be its extent. They are ſubject to ſome diſorders, which it is not our buſineſs to deſcribe; and as for poiſons, beſides nux vomica, which is fatal to moſt animals except man, they are injured, as Linnæus aſſerts, by elder-berries; of which they are not a little fond.

CHAP. III.

Of the Peacock.

THE Peacock, by the common people of Italy, is ſaid to have the plumage of an angel, the voice of a devil, and the guts of a thief. In fact, each of theſe qualities mark pretty well the nature of this extraordinary bird. When it appears with its tail expanded, there is none of the feathered creation can vie with it for beauty; yet the horrid ſcream of its voice ſerves to abate the pleaſure we find from viewing it; and ſtill more, its inſatiable gluttony and ſpirit of depredation make it one of the moſt noxious domeſtics that man has taken under his protection.

Our firſt peacocks were brought from the Eaſt-Indies; and we are aſſured, that they are ſtill found in vaſt flocks, in a wild ſtate, in the

iſlands of Java and Ceylon. So beautiful a bird, and one eſteemed ſuch a delicacy at the tables of the luxurious, could not be permitted to continue long at liberty in its diſtant retreats. So early as the days of Solomon, we find in his navies, among the articles imported from the Eaſt, apes and peacocks. Ælian relates, that they were brought into Greece from ſome barbarous country, and were held in ſuch high eſteem among them, that a male and female were valued at above thirty pounds of our money. We are told alſo, that when Alexander was in India, he found them flying wild, in vaſt numbers, on the banks of the river Hyarotis, and was ſo ſtruck with their beauty, that he laid a ſevere fine and puniſhment on all who ſhould kill or diſturb them. Nor are we to be ſurpriſed at this, as the Greeks were ſo much ſtruck with the beauty of this bird, when firſt brought among them, that every perſon paid a fixed price for ſeeing it; and ſeveral people came to Athens, from Lacedæmon and Theſſaly, purely to ſatisfy their curioſity.

It was probably firſt introduced into the weſt, merely on account of its beauty; but mankind, from contemplating its figure, ſoon came to think of ſerving it up for a different entertainment. Auſidius Hurco ſtands charged by Pliny with being the firſt who fatted up the peacock for the feaſt of the luxurious. Whatever

ever there may be of delicacy in the fleſh of a young peacock, it is certain an old one is very indifferent eating; nevertheleſs, there is no mention made of chuſing the youngeſt; it is probable they were killed indiſcriminately, the beauty of the feathers in ſome meaſure ſtimulating the appetite. Hortenſius the orator was the firſt who ſerved them up at an entertainment at Rome; and from that time they were conſidered as one of the greateſt ornaments of every feaſt. Whether the Roman method of cookery, which was much higher than ours, might not have rendered them more palatable than we find them at preſent, I cannot tell: but certain it is, they talk of the peacock as being the firſt of viands.

Its fame for delicacy, however, did not continue very long; for we find, in the times of Francis the Firſt, that it was a cuſtom to ſerve up peacocks to the tables of the great, with an intention not to be eaten, but only to be ſeen. Their manner was to ſtrip off the ſkin; and then preparing the body with the warmeſt ſpices, they covered it up again in its former ſkin, with all its plumage in full diſplay, and no way injured by the preparation. The bird thus prepared, was often preſerved for many years without corrupting; and it is aſſerted of the peacock's fleſh, that it keeps longer unputrefied than that of any other animal. To give a higher zeſt to

these entertainments, on weddings particularly, they filled the bird's beak and throat with cotton and camphire, which they set on fire, to amuse and delight the company. I do not know that the peacock is much used at our entertainments at present, except now and then at an alderman's dinner or a common-council feast, when our citizens resolve to be splendid; and even then it is never served with its cotton and camphire.

Like other birds of the poultry kind, the peacock feeds upon corn; but its chief predilection is for barley. But as it is a very proud and fickle bird, there is scarce any food that it will not at times covet and pursue. Insects and tender plants are often eagerly sought at a time that it has a sufficiency of its natural food provided more nearly. In the indulgence of these capricious pursuits, walls cannot easily confine it; it strips the tops of houses of their tiles or thatch, it lays waste the labours of the gardener, roots up his choicest seeds, and nips his favourite flowers in the bud. Thus its beauty but ill recompenses for the mischief it occasions; and many of the more homely looking fowls are very deservedly preferred before it.

Nor is the peacock less a debauchee in its affections, than a glutton in its appetites. He is still more salacious than even the cock; and though not possessed of the same vigour, yet

burns with more immoderate desire. He requires five females at least to attend him; and if there be not a sufficient number, he will even run upon and tread the sitting hen. For this reason the pea-hen endeavours, as much as she can, to hide her nest from the male, as he would otherwise disturb her sitting, and break her eggs.

The pea-hen seldom lays above five or six eggs in this climate before she sits. Aristotle describes her as laying twelve; and it is probable, in her native climate, she may be thus prolific; for it is certain, that in the forests where they breed naturally, they are numerous beyond expression. This bird lives about twenty yerrs; and not till its third year has it that beautiful variegated plumage that adorns its tail.

"In the kingdom of Cambaya," says Taverner, "near the city of Baroch, whole flocks "of them are seen in the fields. They are very "shy, however, and it is impossible to come "near them. They run off swifter than the "partridge; and hide themselves in thickets, "where it is impossible to find them. They "perch, by night, upon trees; and the fowler "often approaches them at that season with a "kind of banner, on which a peacock is painted "to the life, on either side. A lighted torch "is fixed on the top of this decoy; and the "peacock,

" peacock, when disturbed, flies to what it takes " for another, and is thus caught in a noose " prepared for that purpose."

There are varieties of this bird, some of which are white, others crested: that which is called the Peacock of Thibet, is the most beautiful of the feathered creation, containing in its plumage all the most vivid colours, red, blue, yellow, and green, disposed in an almost artificial order, as if merely to please the eye of the beholder.

CHAP. IV.

The Turkey.

THE natal place of the cock and the peacock is pretty well ascertained, but there are stronger doubts concerning the Turkey; some contending that it has been brought into Europe from the East Indies many centuries ago; while others assert that it is wholly unknown in that part of the world, that it is a native of the New Continent, and that it was not brought into Europe till the discovery of that part of the world.

Those who contend for the latter opinion, very truly observe, that among all the descriptions we have of Eastern birds, that of the turkey is not to be found: while, on the contrary, it is very

very well known in the New Continent, where it runs wild about the woods. It is ſaid, by them, to be firſt ſeen in France, in the reign of Francis the Firſt; and in England, in that of Henry the Eighth; which is about the time when Mexico was firſt conquered by Spain. On the other hand, it is aſſerted, that the turkey, ſo far from being unknown in Europe before that time, was known even to the ancients; and that Ælian has given a pretty juſt deſcription of it. They alledge, that its very name implies its having been brought from ſome part of the Eaſt; and that it is found, among other dainties ſerved up to the tables of the great, before that time among ourſelves. But what they pretend to be the ſtrongeſt proof is, that though the wild turkey be ſo very common in America, yet the natives cannot contrive to tame it; and though hatched in the ordinary manner, nothing can render it domeſtic. In this diverſity of opinions, perhaps it is beſt to ſuſpend aſſent, till more lights are thrown on the ſubject; however, I am inclined to concur with the former opinion.

With us, when young, it is one of the tenderſt of all birds; yet, in its wild ſtate, it is found in great plenty in the foreſts of Canada, that are covered with ſnow above three parts of the year. In their natural woods, they are found much larger than in their ſtate of domeſtic captivity.

captivity. They are much more beautiful alſo, their feathers being of a dark grey, bordered at the edges with a bright gold-colour. Theſe the ſavages of the country weave into cloaks to adorn their perſons, and faſhion into fans and umbrellas, but never once think of taking into keeping animals that the woods furniſh them with in ſufficient abundance. Savage man ſeems to find a delight in precarious poſſeſſion. A great part of the pleaſure of the chace lies in the uncertainty of the purſuit, and he is unwilling to abridge himſelf in any accidental ſucceſs that may attend his fatigues. The hunting the turkey, therefore, makes one of his principal diverſions; as its fleſh contributes chiefly to the ſupport of his family. When he has diſcovered the place of their retreat, which, in general, is near fields of nettles, or where there is plenty of any kind of grain, he takes his dog with him, which is trained to the ſport, (a faithful rough creature, ſuppoſed to be originally reclaimed from the wolf) and he ſends him into the midſt of the flock. The turkies no ſooner perceive their enemy, than they ſet off running at full ſpeed, and with ſuch ſwiftneſs, that they leave the dog far behind them: he follows nevertheleſs, and ſenſible they muſt ſoon be tired, as they cannot go full ſpeed for any length of time, he, at laſt, forces them to take ſhelter in a tree, where they ſit quite ſpent and fatigued,

fatigued, till the hunter comes up, and, with a long pole, knocks them down one after the other.

This manner of ſuffering themſelves to be deſtroyed, argues no great inſtinct in the animal; and indeed, in their captive ſtate, they do not appear to be poſſeſſed of much. They ſeem a ſtupid, vain, querulous tribe, apt enough to quarrel among themſelves, yet without any weapons to do each other an injury. Every body knows the ſtrange antipathy the turkey-cock has to a red colour; how he briſtles, and, with his peculiar gobbling ſound, flies to attack it. But there is another method of encreaſing the animoſity of theſe birds againſt each other, which is often practiſed by boys, when they have a mind for a battle. This is no more than to ſmear over the head of one of the turkies with dirt, and the reſt run to attack it with all the ſpeed of impotent animoſity: nay, two of them, thus diſguiſed, will fight each other till they are almoſt ſuffocated with fatigue and anger.

But though ſo furious among themſelves, they are weak and cowardly againſt other animals, though far leſs powerful than they. The cock often makes the turkey keep at a diſtance; and they ſeldom venture to attack him but with united force, when they rather oppreſs him by their weight, than annoy him by their arms.

There

There is no animal, how contemptible ſoever, that will venture boldly to face the turkey-cock, that he will not fly from. On the contrary, with the inſolence of a bulley, he purſues any thing that ſeems to fear him, particularly lap-dogs and children, againſt both which he ſeems to have a peculiar averſion. On ſuch occaſions, after he has made them ſcamper, he returns to his female train, diſplays his plumage around, ſtruts about the yard, and gobbles out a note of ſelf-approbation.

The female ſeems of a milder, gentler diſpoſition. Rather querulous than bold, ſhe hunts about in queſt of grain, and purſuit of inſects, being particularly delighted with the eggs of ants and caterpillars. She lays eighteen or twenty eggs, larger than thoſe of a hen, whitiſh, but marked with ſpots reſembling the freckles of the face. Her young are extremely tender at firſt, and muſt be carefully fed with curd chopped with dock-leaves; but as they grow older, they become more hardy, and follow the mother to conſiderable diſtances, in purſuit of inſect food, which they prefer to any other. On theſe occaſions, however, the female, though ſo large, and, as it would ſeem, ſo powerful a bird, gives them but very little protection againſt the attacks of any rapacious animal that comes in her way. She rather warns her young to ſhift for themſelves, than prepares to defend them.

"I have

"I have heard," ſays the Abbé la Pluche, "a "turkey-hen, when at the head of her brood, "ſend forth the moſt hideous ſcream, without "knowing as yet the cauſe: however, her young, "immediately when the warning was given, "ſkulked under the buſhes, the graſs, or what-"ever elſe offered for ſhelter or protection. They "even ſtretched themſelves at their full length "upon the ground, and continued lying as mo-"tionleſs as if they were dead. In the mean "time, the mother, with her eyes directed up-"wards, continued her cries and ſcreaming as "before. Upon looking up to where ſhe ſeem-"ed to gaze, I diſcovered a black ſpot juſt un-"der the clouds, but was unable at firſt to de-"termine what it was; however, it ſoon ap-"peared to be a bird of prey, though at firſt at "too great a diſtance to be diſtinguiſhed. I "have ſeen one of theſe animals continue in "this violent agitated ſtate, and her whole "brood pinned down as it were to the ground, "for four hours together; whilſt their formi-"dable foe has taken his circuits, has mounted, "and hovered directly over their heads: at laſt, "upon diſappearing, the parent began to change "her note, and ſent forth another cry, which "in an inſtant gave life to the whole trembling "tribe, and they all flocked round her with ex-"preſſions of pleaſure, as if conſcious of their "happy eſcape from danger."

When

When once grown up, turkies are very hardy birds, and feed themſelves at very little expence to the farmer. Thoſe of Norfolk are ſaid to be the largeſt of this kingdom, weighing from twenty to thirty pounds. There are places, however, in the Eaſt Indies, where they are known only in their domeſtic ſtate, in which they grow to the weight of ſixty pounds.

CHAP. V.

The Pheaſant.

IT would ſurpriſe a ſportſman to be told that the Pheaſant which he finds wild in the woods, in the remoteſt parts of the kingdom, and in foreſts, which can ſcarce be ſaid to have an owner, is a foreign bird, and was at firſt artificially propagated amongſt us. They were brought into Europe from the banks of the Phaſis, a river of Colchis, in Aſia Minor; and from whence they ſtill retain their name.

Next to the peacock, they are the moſt beautiful of birds, as well for the vivid colour of their plumes, as for their happy mixtures and variety. It is far beyond the power of the pencil to draw any thing ſo gloſſy, ſo bright, or points ſo finely blending into each other. We are told that when Crœſus, king of Lydia, was ſeated on his throne, adorned with royal magnificence,

nificence, and all the barbarous pomp of eaſtern ſplendour, he aſked Solon if he had ever beheld any thing ſo fine! The Greek philoſopher, no way moved by the objects before him, or taking a pride in his native ſimplicity, replied, that after having ſeen the beautiful plumage of the pheaſant, he could be aſtoniſhed at no other finery.

In fact, nothing can ſatisfy the eye with a greater variety and richneſs of ornament than this beautiful creature. The iris of the eye is yellow; and the eyes themſelves are ſurrounded with a ſcarlet colour, ſprinkled with ſmall ſpecks of black. On the fore-part of the head there are blackiſh feathers mixed with a ſhining purple. The top of the head and the upper part of the neck are tinged with a darkiſh green that ſhines like ſilk. In ſome, the top of the head is of a ſhining blue, and the head itſelf, as well as the upper part of the neck, appears ſometimes blue and ſometimes green, as it is differently placed to the eye of the ſpectator. The feathers of the breaſt, the ſhoulders, the middle of the back, and the ſides under the wings, have a blackiſh ground, with edges tinged of an exquiſite colour, which appears ſometimes black and ſometimes purple, according to the different lights it is placed in; under the purple there is a tranſverſe ſtreak of gold-colour. The tail, from the middle feathers to the

the root, is about eighteen inches long; the legs, the feet, and the toes, are of the colour of horn. There are black ſpurs on the legs, ſhorter than thoſe of a cock; there is a membrane that connects two of the toes together; and the male is much more beautiful than the female.

This bird, though ſo beautiful to the eye, is not leſs delicate when ſerved up to the table. Its fleſh is conſidered as the greateſt dainty; and when the old phyſicians ſpoke of the wholeſomeneſs of any viands, they made their compariſon with the fleſh of the pheaſant. However, notwithſtanding all theſe perfections to tempt the curioſity or the palate, the pheaſant has multiplied in its wild ſtate; and, as if diſdaining the protection of man, has left him, to take ſhelter in the thickeſt woods and the remoteſt foreſts. All others of the domeſtic kind, the cock, the turkey, or the pintada, when once reclaimed, have ſtill continued in their domeſtic ſtate, and perſevered in the habits and appetites of willing ſlavery. But the pheaſant, though taken from its native warm retreats, where the woods ſupply variety of food, and the warm ſun ſuits its tender conſtitution, has ſtill continued its attachment to native freedom; and, now wild among us, makes the moſt envied ornament of our parks and foreſts, where he feeds upon acorns

acorns and berries, and the ſcanty produce of our chilling climate.

This ſpirit of independence ſeems to attend the pheaſant even in captivity. In the woods, the hen pheaſant lays from eighteen to twenty eggs in a ſeaſon: but in a domeſtic ſtate ſhe ſeldom lays above ten. In the ſame manner, when wild, ſhe hatches and leads up her brood with patience, vigilance, and courage; but when kept tame, ſhe never ſits well; ſo that a hen is generally her ſubſtitute upon ſuch occaſions; and as for leading her young to their food, ſhe is utterly ignorant of where it is to be found; and the young birds ſtarve, if left ſolely to her protection. The pheaſant, therefore, on every account, ſeems better left at large in the woods than reclaimed to priſtine captivity. Its fecundity when wild is ſufficient to ſtock the foreſt; its beautiful plumage adorns it; and its fleſh retains a higher flavour from its unlimited freedom.

However, it has been the aim of late to take theſe birds once more from the woods, and to keep them in places fitted for their reception. Like all others of the poultry kind, they have no great ſagacity, and ſuffer themſelves eaſily to be taken. At night they rooſt upon the higheſt trees of the wood; and by day they come down into the lower brakes and buſhes, where their food is chiefly found. They gene-

rally

rally make a kind of flapping noiſe when they are with the females; and this often apprizes the ſportſman of their retreats. At other times he tracks them in the ſnow, and frequently takes them in ſprings. But of all birds they are ſhot moſt eaſily, as they always make a whirring noiſe when they riſe, by which they alarm the gunner, and being a large mark, and flying very ſlow, there is ſcarce any miſſing them.

Ah! what avail his gloſſy, varying dyes,
His purpled creſt and ſcarlet-circled eyes,
The vivid green his ſhining plumes unfold,
His painted wings, and breaſt that flames with gold?

POPE.

When theſe birds are taken young into keeping, they become as familiar as chickens; and when they are deſigned for breeding, they are put together in a yard, five hens to a cock; for this bird, like all of the poultry kind, is very ſalacious. In her natural ſtate the female makes her neſt of dry graſs and leaves; the ſame muſt be laid for her in the pheaſandry, and ſhe herſelf will ſometimes properly diſpoſe them. If ſhe refuſes to hatch her eggs, then a common hen muſt be got to ſupply her place, which taſk ſhe will perform with perſeverance and ſucceſs. The young ones are very difficult to be reared; and they muſt be ſupplied with ants-eggs, which is the food the old one leads them to gather when

when wild in the woods. To make these go the farther, they are to be chopped up with curds or other meat; and the young ones are to be fed with great exactness, both as to the quantity and the time of their supply. This food is sometimes also to be varied, and wood-lice, earwigs, and other insects, are to make a variety. The place where they are reared must be kept extremely clean; their water must be changed twice or thrice a day; they must not be exposed till the dew is off the ground in the morning; and they should always be taken in before sun-set. When they become adult, they very well can shift for themselves, but they are particularly fond of oats and barley.

In order to encrease the breed, and make it still more valuable, Longolius teaches us a method that appears very peculiar. The pheasant is a very bold bird when first brought into the yard among other poultry, not sparing the peacock, nor even such young cocks and hens as it can master; but after a time it will live tamely among them, and will at last be brought to couple with a common hen. The breed thus produced take much stronger after the pheasant than the hen; and in a few successions, if they be let to breed with the cock-pheasant, for the mixture is not barren, there will be produced a species more tame, stronger, and more prolific; so that he adds, that it is strange why most of

our pheaſandries are not ſtocked with birds produced in this manner.

The pheaſant, when full grown, ſeems to feed indifferently upon every thing that offers. It is ſaid by a French writer, that one of the king's ſportſmen ſhooting at a parcel of crows, that were gathered round a dead carcaſe, to his great ſurprize upon coming up, found that he had killed as many pheaſants as crows. It is even aſſerted by ſome, that ſuch is the carnivorous diſpoſition of this bird, that when ſeveral of them are put together in the ſame yard, if one of them happens to fall ſick, or ſeems to be pining, that all the reſt will fall upon, kill, and devour it. Such is the language of books; thoſe who have frequent opportunities of examining the manners of the bird itſelf, know what credit ought to be given to ſuch an account.

Of the pheaſant, as of all other domeſtic fowl, there are many varieties. There are white pheaſants, creſted pheaſants, ſpotted pheaſants; but of all others, the golden pheaſant of China is the moſt beautiful. It is a doubt whether the peacock itſelf can bear the compariſon. However, the natives of China would not have us conſider it as their moſt beautiful bird, though covered all over with eyes, reſembling in miniature thoſe of a peacock. By their accounts, it is far exceeded by the fongwhang,

an imaginary bird, of which they give a moſt fantaſtic deſcription. It is thus that the people of every country, though poſſeſſed of the greateſt advantages, have ſtill others that they would perſuade ſtrangers they enjoy, which have exiſtence only in the imagination.

CHAP. VI.

The Pintada or Guinea-Hen.

THIS is a very remarkable bird, and in ſome meaſure unites the characteriſtics of the pheaſant and the turkey. It has the fine delicate ſhape of the one, and the bare head of the other. To be more particular, it is about the ſize of a common hen; but as it is ſupported on longer legs, it looks much larger. It has a round back, with a tail turned downwards like a partridge. The head is covered with a kind of caſque; and the whole plumage is black or dark grey, ſpeckled with white ſpots. It has wattles under the bill, which do not proceed from the lower chap as in cocks, but from the upper, which gives it a very peculiar air, while its reſtleſs gait and odd chuckling ſound diſtinguiſh it ſufficiently from all other birds whatever.

It is well known all over Europe, and even better than with us, as the nations that border on the Mediterranean probably had it before us

from thoſe parts of Africa which lay neareſt. Accordingly we find it in different countries called by different names, from the place whence they had it. They are by ſome called the Barbary-hen; by others, the Tamis bird; and by others, the bird of Numidia. We have given it the name of that part of Africa from whence probably it was firſt brought.

In many parts of their native country, they are ſeen in vaſt flocks together, feeding their young, and leading them in queſt of food. All their habits are like thoſe of the poultry-kind, and they agree in every other reſpect, except that the male and female are ſo much alike, that they can hardly be diſtinguiſhed aſunder. The only difference lies in the wattles deſcribed above, which in the cock are of a blueiſh caſt; in the hen, they are more inclining to a red. Their eggs, like their bodies, are ſpeckled; in our climate, they lay but five or ſix in a ſeaſon; but they are far more prolific in their ſultry regions at home. They are kept among us rather for ſhew than uſe, as their fleſh is not much eſteemed, and as they give a good deal of trouble in the rearing.

CHAP.

CHAP. VII.

The Buſtard.

THE Buſtard is the largeſt land-bird that is a native of Britain. It was once much more numerous than it is at preſent; but the encreaſed cultivation of the country, and the extreme delicacy of its fleſh, has greatly thinned the ſpecies; ſo that a time may come when it may be doubted whether ever ſo large a bird was bred among us. It is probable that long before this the buſtard would have been extirpated, but for its peculiar manner of feeding. Had it continued to ſeek ſhelter among our woods, in proportion as they were cut down, it muſt have been deſtroyed. If in the foreſt, the fowler might approach it without being ſeen; and the bird, from its ſize, would be too great a mark to be eaſily miſſed. But it inhabits only the open and extenſive plain, where its food lies in abundance, and where every invader may be ſeen at a diſtance.

The buſtard is much larger than the turkey, the male generally weighing from twenty-five to twenty-ſeven pounds. The neck is a foot long, and the legs a foot and a half. The wings are not proportionable to the reſt of the body, being but four feet from the tip of one to the

other; for which reaſon the bird flies with great difficulty. The head and neck of the male are aſh-coloured; the back is barred tranſverſely with black, bright, and ruſt-colour. The greater quill feathers are black; the belly white; and the tail, which conſiſts of twenty feathers, is marked with broad black bars.

It would ſeem odd, as was hinted before, how ſo large a land-bird as this could find ſhelter in ſo cultivated a country as England; but the wonder will ceaſe when we find it only in the moſt open countries, where there is ſcarce any approaching without being diſcovered. They are frequently ſeen in flocks of fifty or more, in the extenſive downs of Saliſbury Plain, in the heaths of Suſſex and Cambridgeſhire, the Dorſetſhire uplands, and ſo on as far as Eaſt Lothian in Scotland. In thoſe extenſive plains, where there are no woods to ſcreen the ſportſman, nor hedges to creep along, the buſtards enjoy an indolent ſecurity. Their food is compoſed of the berries that grow among the heath, and the large earth-worms that appear in great quantities on the downs before ſun-riſing in ſummer. It is in vain that the fowler creeps forward to approach them, they have always centinels placed at proper eminences, which are ever on the watch, and warn the flock of the ſmalleſt appearance of danger. All therefore that is left the ſportſman, is the comfortleſs view of their

their diſtant ſecurity. He may wiſh, but they are in ſafety.

It ſometimes happens that theſe birds, though they are ſeldom ſhot by the gun, are often run down by grey-hounds. As they are voracious and greedy, they often ſacrifice their ſafety to their appetite, and feed themſelves ſo very fat, that they are unable to fly without great preparation. When the grey-hound, therefore, comes within a certain diſtance, the buſtard runs off flapping its wings, and endeavouring to gather air enough under them to riſe; in the mean time, the enemy approaches nearer and nearer, till it is too late for the bird even to think of obtaining ſafety by flight; for juſt at the riſe there is always time loſt, and of this the bird is ſenſible; it continues, therefore, on the foot until it has got a ſufficient way before the dog for flight, or until it is taken.

As there are few places where they can at once find proper food and ſecurity, ſo they generally continue near their old haunts, ſeldom wandering above twenty or thirty miles from home. As their food is replete with moiſture, it enables them to live upon theſe dry plains, where there are ſcarcely any ſprings of water, a long time without drinking. Beſides this, Nature has given the males an admirable magazine for their ſecurity againſt thirſt. This is a pouch, the entrance of which lies imme-

diately under the tongue, and capable of holding near ſeven quarts of water. This is probably filled upon proper occaſions, to ſupply the hen when ſitting, or the young before they can fly.

Like all other birds of the poultry-kind, they change their mates at the ſeaſon of incubation, which is about the latter end of ſummer. They ſeparate in pairs if there be a ſufficiency of females for the males; but when this happens to be otherwiſe, the males fight until one of them falls. In France, they often find ſome of thoſe victims to gallantry dead in the fields, and no doubt are not diſpleaſed at the occaſion.

They make their neſts upon the ground, only juſt ſcraping a hole in the earth, and ſometimes lining it with a little long graſs or ſtraw. There they lay two eggs only, almoſt of the ſize of a gooſe-egg, of a pale olive brown, marked with ſpots of a darker colour. They hatch for about five weeks, and the young ones run about as ſoon as they are out of the ſhell.

The buſtards aſſemble in flocks in the month of October, and keep together till April. In winter, as their food becomes more ſcarce, they ſupport themſelves indiſcriminately by feeding on moles, mice, and even little birds, when they can ſeize them. For want of other food, they are contented to live upon turnep-leaves and ſuch like ſucculent vegetables. In ſome parts of

of Switzerland, they are found frozen in the fields in ſevere weather; but when taken to a warm place they again recover. They uſually live fifteen years, and are incapable of being propagated in a domeſtic ſtate, as they probably want that food which beſt agrees with their appetite.

CHAP. VIII.

The Grous, and its Affinities.

THE Cock of the Wood, the Black Cock, the Grous, and the Ptarmigan.—Theſe are all birds of a ſimilar nature, and chiefly found in heathy mountains and piny foreſts, at a diſtance from mankind. They might once indeed have been common enough all over England, when a great part of the country was covered with heath; but at preſent their numbers are thinned: the two firſt of this kind are utterly unknown in the ſouth, and have taken refuge in the northern parts of Scotland, where the extenſive heaths afford them ſecurity, and the foreſts ſhelter.

The cock of the wood is ſometimes of the ſize of a turkey, and often weighs near fourteen pounds; the black cock, of which the male is all over black, though the female is of the colour of a partridge, is about the ſize of an hen,

and, like the former, is only found with us in the Highlands of Scotland; the grous is about half as large again as a partridge, and its colour much like that of a woodcock, but redder; the ptarmigan is ſtill ſomewhat leſs, and is of a pale brown or aſh-colour. They are all diſtinguiſhable from other birds of the poultry kind, by a naked ſkin, of a ſcarlet colour, above the eyes, in the place and of the figure of eye-brows.

It ſeems to be ſomething extraordinary, that all the larger wild animals of every ſpecies chuſe the darkeſt and the inmoſt receſſes of the woods for their reſidence, while the ſmaller kinds come more into the open and cultivated parts, where there is more food and more danger. It is thus with the birds I am deſcribing: while the cock of the wood is ſeldom ſeen, except on the inacceſſible parts of heathy mountains, or in the midſt of piny foreſts, the grous is found, in great numbers, in the neighbourhood of cornfields, where there is heath to afford retreat and ſhelter. Their food too ſomewhat differs: while the ſmaller kind lives upon heath-bloſſoms, cranberries, and corn, the larger feeds upon the cones of the pine-tree; and will ſometimes entirely ſtrip one tree, before it offers to touch thoſe of another, though juſt beſide him. In other reſpects, the manners of theſe birds are the ſame; being both equally ſimple in their diet, and licentious in their amours.

The

The Cock of the Wood, for it is from him we will take our deſcription, is, as was ſaid, chiefly fond of a mountainous and wooded ſituation. In winter he reſides in the darkeſt and inmoſt part of the woods; in ſummer he ventures down from his retreats, to make ſhort depredations on the farmer's corn. The delicacy of his fleſh in ſome meaſure fets a high price upon his head; and as he is greatly ſought after, ſo he continues, when he comes down from the hills, always on his guard. Upon theſe occaſions, he is ſeldom ſurpriſed; and thoſe who would take him, muſt venture up to find him in his native retreats.

The cock of the wood, when in the foreſt, attaches himſelf principally to the oak and the pine-tree; the cones of the latter ſerving for his food, and the thick boughs for an habitation. He even makes a choice of what cones he ſhall feed upon; for he ſometimes will ſtrip one tree bare before he will deign to touch the cones of another. He feeds alſo upon ants eggs, which ſeem a high delicacy to all birds of the poultry kind: cranberries are likewiſe often found in his crop; and his gizzard, like that of domeſtic fowls, contains a quantity of gravel, for the purpoſes of aſſiſting his powers of digeſtion.

At the earlieſt return of ſpring, this bird begins to feel the genial influence of the ſeaſon.

During the month of March, the approaches of courtſhip are continued, and do not deſiſt till the trees have all their leaves, and the foreſt is in full bloom. During this whole ſeaſon, the cock of the wood is ſeen at ſun-riſe and ſetting extremely active upon one of the largeſt branches of the pine-tree. With his tail raiſed and expanded like a fan, and the wings drooping, he is ſeen walking backward and forward, his neck ſtretched out, his head ſwoln and red, and making a thouſand ridiculous poſtures: his cry, upon that occaſion, is a kind of loud exploſion, which is inſtantly followed by a noiſe like the whetting of a ſcythe, which ceaſes and commences alternately for about an hour, and is then terminated by the ſame exploſion.

During the time this ſingular cry continues, the bird ſeems entirely deaf, and inſenſible of every danger: whatever noiſe may be made near him, or even though fired at, he ſtill continues his call; and this is the time that ſportſmen generally take to ſhoot him. Upon all other occaſions, he is the moſt timorous and watchful bird in nature: but now he ſeems entirely abſorbed by his inſtincts; and ſeldom leaves the place where he firſt begins to feel the acceſſes of deſire. This extraordinary cry, which is accompanied by a clapping of the wings, is no ſooner finiſhed, than the female hearing it replies,

plies, approaches, and places herſelf under the tree, from whence the cock deſcends to impregnate her. The number of females that, on this occaſion, reſort to his call, is uncertain; but one male generally ſuffices for all.

The female is much leſs than her mate, and entirely unlike him in plumage, ſo that ſhe might be miſtaken for a bird of another ſpecies: ſhe ſeldom lays more than ſix or ſeven eggs, which are white, and marked with yellow, of the ſize of a common hen's egg: ſhe generally lays them in a dry place and a moſſy ground, and hatches them without the company of the cock. When ſhe is obliged, during the time of incubation, to leave her eggs in queſt of food, ſhe covers them up ſo artfully, with moſs or dry leaves, that it is extremely difficult to diſcover them. On this occaſion, ſhe is extremely tame and tranquil, however wild and timorous in ordinary. She often keeps to her neſt, though ſtrangers attempt to drag her away.

As ſoon as the young ones are hatched, they are ſeen running with extreme agility after the mother, though ſometimes they are not entirely diſengaged from the ſhell. The hen leads them forward, for the firſt time, into the woods, ſhews them ants eggs, and the wild mountain-berries, which, while young, are their only food. As they grow older, their appetites grow ſtronger,

ſtronger, and they then feed upon the tops of hether and the cones of the pine-tree. In this manner they ſoon come to perfection: they are an hardy bird, their food lies every where before them, and it would ſeem that they ſhould encreaſe in great abundance. But this is not the caſe; their numbers are thinned by rapacious birds and beaſts of every kind; and ſtill more by their own ſalacious conteſts.

As ſoon as the clutching is over, which the female performs in the manner of an hen, the whole brood follows the mother for about a month or two; at the end of which the young males entirely forſake her, and keep in great harmony together till the beginning of ſpring. At this ſeaſon they begin, for the firſt time, to feel the genial acceſs; and then adieu to all their former friendſhips! They begin to conſider each other as rivals; and the rage of concupiſcence quite extinguiſhes the ſpirit of ſociety. They fight each other, like game cocks; and at that time are ſo inattentive to their own ſafety, that it often happens that two or three of them are killed at a ſhot. It is probable, that in theſe conteſts, the bird which comes off victorious takes poſſeſſion of the female ſeraglio, as it is certain that they have no faithful attachments *.

* This account of the Cock of the Wood is taken from the Journal Œconomique, and may be relied on.

CHAP.

CHAP. IX.

Of the Partridge, and its Varieties.

THE Partridge may be particularly conſidered as belonging to the ſportſman. It is a bird which even our laws have taken under protection; and, like a peacock or a hen, may be ranked as a private property. The only difference now is, that we feed one in our farms, the other in our yards; that theſe are contented captives; thoſe, ſervants that have it in their power to change their maſter, by changing their habitation.

"Theſe birds," ſays Willughby, "hold the "principal place in the feaſts and entertainments "of princes; without which their feaſts are "eſteemed ignoble, vulgar, and of no account. "The Frenchmen do ſo highly value, and are "ſo fond of the partridge, that if they be "wanting, they utterly ſlight and deſpiſe the "beſt ſpread tables; as if there could be no "feaſt without them." But however this might be in the times of our hiſtorian, the partridge is now too common in France to be conſidered as a delicacy; and this, as well as every other ſimple diſh, is exploded for luxuries of a more compound invention.

In England, where the partridge is much ſcarcer,

ſcarcer, and a great deal dearer, it is ſtill a favourite delicacy at the tables of the rich; and the deſire of keeping it to themſelves, has induced them to make laws for its preſervation, no way harmonizing with the general ſpirit of Engliſh legiſlation. What can be more arbitrary than to talk of preſerving the game; which, when defined, means no more than that the poor ſhall abſtain from what the rich have taken a fancy to keep for themſelves? If theſe birds could, like a cock or a hen, be made legal property; could they be taught to keep within certain diſtricts, and only feed on thoſe grounds that belong to the man whoſe entertainments they improve, it then might, with ſome ſhew of juſtice, be admitted, that as a man fed them ſo he might claim them. But this is not the caſe; nor is it in any man's power to lay a reſtraint upon the liberty of theſe birds, that, when let looſe, put no limits to their excurſions. They feed every where, upon every man's ground; and no man can ſay, Theſe birds are fed only by me. Thoſe birds which are nouriſhed by all, belong to all; nor can any one man, or any ſet of men, lay claim to them, when ſtill continuing in a ſtate of nature.

I never walked out about the environs of Paris, that I did not conſider the immenſe quantity of game that was running almoſt tame

on

on every ſide of me, as a badge of the ſlavery of the people; and what they wiſhed me to obſerve as an object of triumph, I always regarded with a kind of ſecret compaſſion: yet this people have no game-laws for the remoter parts of the kingdom; the game is only preſerved in a few places for the king; and is free in moſt places elſe. In England, the prohibition is general; and the peaſant has not a right to what even ſlaves, as he is taught to call them, are found to poſſeſs.

Of partridges there are two kinds; the grey and the red. The red partridge is the largeſt of the two, and often perches upon trees; the grey, with which we are beſt acquainted in England, is moſt prolific, and always keeps on the ground.

The partridge ſeems to be a bird well known all over the world, as it is found in every country, and in every climate; as well in the frozen regions about the pole, as the torrid tracts under the equator. It even ſeems to adapt itſelf to the nature of the climate where it reſides. In Greenland, the partridge, which is brown in ſummer, as ſoon as the icy winter ſets in, begins to take a covering ſuited to the ſeaſon: it is then cloathed with a warm down beneath; and its outward plumage aſſumes the colour of the ſnows amongſt which it ſeeks its food. Thus it is doubly fitted for the place,

by

by the warmth and the colour of its plumage; the one to defend it from the cold, the other to prevent its being noticed by the enemy. Thoſe of Barakonda, on the other hand, are longer legged, much ſwifter of foot, and chuſe the higheſt rocks and precipices to reſide in.

They all, however, agree in one character, of being immoderately addicted to venery; and, as ſome writers affirm, often to an unnatural degree. It is certain, the male will purſue the hen even to her neſt; and will break her eggs, rather than not indulge his inclinations. Though the young ones have kept together in flocks during the winter, when they begin to pair in ſpring, their ſociety diſperſes; and combats, very terrible with reſpect to each other, enſue. Their manners, in other circumſtances, reſemble all thoſe of poultry in general; but their cunning and inſtincts ſeem ſuperior to thoſe of the larger kinds. Perhaps, as they live in the very neighbourhood of their enemies, they have more frequent occaſion to put their little arts in practice; and learn, by habit, the means of evaſion or ſafety. Whenever, therefore, a dog or other formidable animal approaches their neſt, the female uſes every means to draw him away. She keeps juſt before him, pretends to be incapable of flying, juſt hops up and then falls down before him, but never goes off ſo far as to diſcourage her purſuer. At length, when

ſhe

ſhe has drawn him entirely away from her ſecret treaſure, ſhe at once takes wing, and fairly leaves him to gaze after her in deſpair.

After the danger is over, and the dog withdrawn, ſhe then calls her young, who aſſemble at once at her cry, and follow where ſhe leads them. There are generally from ten to fifteen in a covey; and, if unmoleſted, they live from fifteen to ſeventeen years.

There are ſeveral methods of taking them, as is well known; that by which they are taken in a net, with a ſetting dog, is the moſt pleaſant, as well as the moſt ſecure. The dog, as every body know, is trained to this exerciſe, by a long courſe of education: by blows and careſſes he is taught to lie down at the word of command; a partridge is ſhewn him, and he is then ordered to lie down; he is brought into the field, and when the ſportſman perceives where the covey lies, he orders his dog to crouch: at length the dog, from habit, crouches wherever he approaches a covey; and this is the ſignal which the ſportſman receives for unfolding and covering the birds with his net. A covey thus caught, is ſometimes fed in a place proper for their reception; but they can never be thoroughly tamed, like the reſt of our domeſtic poultry.

CHAP.

CHAP. X.

The Quail.

THE laſt of the poultry kind that I ſhall mention is the Quail; a bird much ſmaller than any of the former, being not above half the ſize of a partridge. The feathers of the head are black, edged with ruſty brown; the breaſt is of a pale yellowiſh red, ſpotted with black; the feathers on the back are marked with lines of pale yellow, and the legs are of a pale hue. Except in the colours thus deſcribed, and the ſize, it every way reſembles a partridge in ſhape; and, except that it is a bird of paſſage, all others of the poultry kind, in its habits and nature.

The quail is by all known to be a bird of paſſage; and yet if we conſider its heavy manner of flying, and its dearth of plumage, with reſpect to its corpulence, we ſhall be ſurpriſed how a bird ſo apparently ill qualified for migration, ſhould take ſuch extenſive journeys. Nothing however is more certain: "When we "failed from Rhodes to Alexandria," ſays Bellonius, "about autumn, many quails, flying "from the north to the ſouth, were taken in "our ſhip; and ſailing at ſpring-time the con-"trary way, from the ſouth to the north, I ob-"ſerved

" ſerved them on their return, when many of " them were taken in the ſame manner." This account is confirmed by many others; who aver, that they chuſe a north wind for theſe adventures; the ſouth wind being very unfavourable, as it retards their flight, by moiſtening their plumage. They then fly two by two; continuing, when their way lies over land, to go faſter by night than by day; and to fly very high, to avoid being ſurpriſed or ſet upon by birds of prey. However, it ſtill remains a doubt whether quails take ſuch long journies as Bellonius has made them perform. It is now aſſerted by ſome, that the quail only migrates from one province of a country to another. For inſtance, in England, they fly from the inland counties to thoſe bordering on the ſea, and continue there all the winter. If froſt or ſnow drive them out of the ſtubble fields or marſhes, they then retreat to the ſea ſide, ſhelter themſelves among the weeds, and live upon what is thrown up from the ſea upon ſhore. Particularly in Eſſex, the time of their appearance upon the coaſts of that country exactly coincides with their diſappearance from the more internal parts of the kingdom; ſo that what has been ſaid of their long flights, is probably not ſo well founded as is generally ſuppoſed.

Theſe birds are much leſs prolific than the partridge; ſeldom laying more than ſix or ſeven whitiſh

whitiſh eggs, marked with ragged, ruſt-coloured ſpots. But their ardour in courtſhip yields ſcarce to any other bird, as they are fierce and cruel at that ſeaſon to each other, fighting moſt deſperately, and (a puniſhment they richly deſerve) being at that time very eaſily taken. Quail-fighting was a favourite amuſement among the Athenians; they abſtained from the fleſh of this bird, deeming it unwholeſome, as ſuppoſing that it fed upon the white hellebore; but they reared great numbers of them, for the pleaſure of ſeeing them fight; and ſtaked ſums of money, as we do with regard to cocks, upon the ſucceſs of the combat. Faſhion, however, has at preſent changed with regard to this bird; we take no pleaſure in its courage, but its fleſh is conſidered as a very great delicacy.

Quails are eaſily caught by a call: the fowler, early in the morning, having ſpread his net, hides himſelf under it, among the corn; he then imitates the voice of the female, with his quail-pipe, which the cock hearing, approaches with the utmoſt aſſiduity; when he has got under the net, the fowler then diſcovers himſelf, and terrifies the quail, who attempting to get away, entangles himſelf the more in the net, and is taken. The quail may thus very well ſerve to illuſtrate the old adage, That every paſſion, carried to an inordinate exceſs, will at laſt lead to ruin.

OF

BIRDS

OF THE

PIE KIND.

PART III.

CHAP. I.

Birds of the Pie Kind.

IN marſhalling our army of the feathered creation, we have placed in the van a race of birds long bred to war, and whoſe paſſion is ſlaughter; in the center we have placed the ſlow and heavy laden, that are uſually brought into the field to be deſtroyed; we now come to a kind of light infantry, that partake ſomething of the ſpirit of the two former, and yet belonging to neither. In this claſs we muſt be content to marſhal a numerous irregular tribe, variouſly armed, with different purſuits, appetites and manners; not formidably formed for war, and yet generally delighting in miſchief; not ſlowly and uſefully obedient, and yet without any profeſſed enmity to the reſt of their fellow-tenants of air.

To ſpeak without metaphor, under this claſs of birds we may arrange all that noiſy, reſtleſs, chattering, teizing tribe that lies between the hen and the thruſh, that, from the ſize of the raven down to that of the wood-pecker, flutter round our habitations, and, rather with the ſpirit of pilferers than of robbers, make free with the fruits of human induſtry.

Of all the other claſſes, this ſeems to be that which the leaſt contributes to furniſh out the pleaſures or ſupply the neceſſities of man. The falcon hunts for him; the poultry tribe ſupplies him with luxurious food; and the little ſparrow race delight him with the melody of their warblings. The crane kind make a ſtudied variety in his entertainments; and the claſs of ducks are not only many of them delicate in their fleſh, but extremely uſeful for their feathers. But in the claſs of the pie kind there are few except the pigeon that are any way uſeful. They ſerve rather to teize man than to aſſiſt or amuſe him. Like faithleſs ſervants, they are fond of his neighbourhood, becauſe they moſtly live by his labour; but their chief ſtudy is what they can plunder in his abſence, while their deaths make him no atonement for their depredation.

But though, with reſpect to man, this whole claſs is rather noxious than beneficial; though he may conſider them in this light, as falſe, noiſy, troubleſome neighbours, yet, with reſpect to each other, no claſs of birds are ſo ingenious, ſo active, or ſo well fitted for ſociety. Could we ſuppoſe a kind of morality among birds, we ſhould find that theſe are by far the moſt induſtrious, the moſt faithful, the moſt conſtant, and the moſt connubial. The rapacious kinds drive out their young before they are fit to ſtruggle with

with adverſity; but the pie kind cheriſh their young to the laſt. The poultry claſs are faithleſs and promiſcuous in their courtſhip; but theſe live in pairs, and their attachments are wholly confined to each other. The ſparrow kind frequently overleap the bounds of Nature, and make illicit varieties; but theſe never. They live in harmony with each other; every ſpecies is true to its kind, and tranſmits an unpolluted race to poſterity.

As other kinds build in rocks or upon the ground, the chief place where theſe build is in trees or buſhes; the male takes his ſhare in the labours of building the neſt, and often relieves his mate in the duties of incubation. Both take this office by turns; and when the young are excluded, both are equally active in making them an ample proviſion.

They ſometimes live in ſocieties; and in theſe there are general laws obſerved, and a kind of republican form of government eſtabliſhed among them. They watch not only for the general ſafety, but for that of every other bird of the grove. How often have we ſeen a fowler, ſtealing in upon a flock of ducks or wild geeſe, diſturbed by the alarming note of a crow or a magpie! its ſingle voice gave the whole thoughtleſs tribe warning, and taught them in good time to look to their ſafety.

Nor are these birds less remarkable for their instincts than their capacity for instruction. There is an apparent cunning or archness in the look of the whole tribe; and I have seen crows and ravens taught to fetch and carry with the docility of a spaniel. Indeed, it is often an exercise that without teaching all this tribe are but too fond of. Every body knows what a passion they have for shining substances, and such toys as some of us put a value upon. A whole family has been alarmed at the loss of a ring; every servant has been accused, and every creature in the house, conscious of their own innocence, suspected each other, when, to the utter surprize of all, it has been found in the nest of a tame magpie or a jack-daw that nobody had ever thought of.

However, as this class is very numerous, it is not to be supposed that the manners are alike in all. Some, such as the pigeon, are gentle and serviceable to man; others are noxious, capricious, and noisy. In a few general characters they all agree; namely, in having hoarse voices, slight active bodies, and a facility of flight, that baffles even the boldest of the rapacious kinds in the pursuit. I will begin with those birds which most properly may be said to belong to this class, and go on till I finish with the pigeon, an harmless bird, that resembles this tribe in little else except their size, and that seems to be the

the ſhade uniting the pie and the ſparrow kind into one general picture.

It is not to be expected that in this ſketch of the great magazine of Nature we can ſtop ſingly to contemplate every object. To deſcribe the number that offers would be tedious, and the ſimilitude that one bears another would make the hiſtory diſguſting. As an hiſtorian in relating the actions of ſome noble people does not ſtop to give the character of every private man in the army, but only of ſuch as have been diſtinguiſhed by their conduct, courage, or treachery; ſo ſhould the hiſtorian of Nature only ſeize upon the moſt ſtriking objects before him; and, having given one common account of the moſt remarkable, refer the peculiarities of the reſt to their general deſcription.

CHAP. II.

Of the Raven, the Crow, and their Affinities.

THE Raven, the Carrion-Crow, and the Rook, are birds ſo well known, that a long deſcription would but obſcure our ideas of them. The raven is the largeſt of the three, and diſtinguiſhed from the reſt not only by his ſize, but by his bill being ſomewhat more hooked than that of the reſt. As for the carrion-crow

and the rook, they ſo ſtrongly reſemble each other, both in make and ſize, that they are not eaſily diſtinguiſhed aſunder. The chief difference to be found between them lies in the bill of the rook; which, by frequently being thruſt into the ground to fetch out grubs and earth-worms, is bare of feathers as far as the eyes, and appears of a whitiſh colour. It differs alſo in the purple ſplendour or gloſs of its feathers, which in the carrion-crow are of a more dirty black. Nor is it amiſs to make theſe diſtinctions, as the rook has but too frequently ſuffered for its ſimilitude to the carrion-crow; and thus an harmleſs bird, that feeds only upon inſects and corn, has been deſtroyed for another that feeds upon carrion, and is often deſtructive among young poultry.

The manners of the raven and the carrion-crow are exactly ſimilar; they both feed upon carion; they fly only in pairs: and will deſtroy other birds, if they can take them by ſurprize. But it is very different with the rook, the daw, and the Corniſh chough, which may be all ranked in this order. They are ſociable and harmleſs; they live only upon inſects and grain; and wherever they are, inſtead of injuring other birds, they ſeem centinels for the whole feathered creation. It will be proper, therefore, to deſcribe theſe two ſorts according to their reſpective appetites, as they have nothing in common but

but the very ſtrong ſimilitude they bear to each other in their colour and formation.

The raven is a bird found in every region of the world: ſtrong and hardy, he is uninfluenced by the changes of the weather; and when other birds ſeem numbed with cold, or pining with famine, the raven is active and healthy, buſily employed in prowling for prey, or ſporting in the coldeſt atmoſphere. As the heats at the line do not oppreſs him, ſo he bears the cold of the polar countries with equal indifference. He is ſometimes indeed ſeen milk white, and this may probably be the effect of the rigorous climates of the north. It is moſt likely that this change is wrought upon him as upon moſt other animals in that part of the world, where their robes, particularly in winter, aſſume the colour of the country they inhabit. As in old age, when the natural heat decays, the hair grows grey, and at laſt white, ſo among theſe animals the cold of the climate may produce a ſimilar languiſhment of colour, and may ſhut up thoſe pores that conveyed the tincturing fluids to the extremeſt parts of the body.

However this may be, white ravens are often ſhown among us, which, I have heard ſome ſay, are rendered thus by art; and this we could readily ſuppoſe if they were as eaſily changed in their colour as they are altered in their habits and diſpoſitions. A raven may be reclaimed to

almoſt every purpoſe to which birds can be converted. He may be trained up for fowling like an hawk; he may be taught to fetch and carry like a ſpaniel; he may be taught to ſpeak like a parrot: but the moſt extraordinary of all is, that he can be taught to ſing like a man. I have heard a raven ſing the Black Joke with great diſtinctneſs, truth, and humour.

Indeed, when the raven is taken as a domeſtic, he has many qualities that render him extremely amuſing. Buſy, inquiſitive, and impudent, he goes every where, affronts and drives off the dogs, plays his pranks on the poultry, and is particularly aſſiduous in cultivating the good will of the cook-maid, who ſeems to be the favourite of the family. But then, with the amuſing qualities of a favourite, he often alſo has the vices and defects. He is a glutton by nature, and a thief by habit. He does not confine himſelf to petty depredations on the pantry or the larder; he ſoars at more magnificent plunder; at ſpoils that he can neither exhibit nor enjoy; but which, like a miſer, he reſts ſatisfied with having the ſatisfaction of ſometimes viſiting and contemplating in ſecret. A piece of money, a tea-ſpoon, or a ring, are always tempting baits to his avarice; theſe he will ſlily ſeize upon, and if not watched will carry to his favourite hole.

In his wild ſtate, the raven is an active and greedy

greedy plunderer. Nothing comes amiss to him; whether his prey be living or long dead it is all the same, he falls to with a voracious appetite; and when he has gorged himself flies to acquaint his fellows that they may participate of the spoil. If the carcase be already in the possession of some more powerful animal, a wolf, a fox, or a dog, the raven sits at a little distance, content to continue an humble spectator till they have done. If in his flights he perceives no hopes of carrion, and his scent is so exquisite that he can smell it at a vast distance, he then contents himself with more unsavory food, fruits, insects, and the accidental desert of a dunghill.

This bird chiefly builds its nest in trees, and lays five or six eggs of a pale green colour, marked with small browniſh spots. They live sometimes in pairs, and sometimes they frequent in great numbers the neighbourhood of populous cities, where they are useful in devouring those carcases that would otherwise putrefy and infect the air. They build in high trees or old towers, in the beginning of March with us in England, and sometimes sooner, as the spring is more or less advanced for the season. But it is not always near towns that they fix their retreats: they often build in unfrequented places, and drive all other birds from their vicinity. They will not permit even

their young to keep in the ſame diſtrict, but drive them off when they are ſufficiently able to ſhift for themſelves. Martin, in his deſcription of the Weſtern Iſles, avers that there are three little iſlands among the number which are occupied by a pair of ravens each, that drive off all other birds with great cries and impetuoſity.

Notwithſtanding the injury theſe birds do in picking out the eyes of ſheep and lambs, when they find them ſick and helpleſs, a vulgar reſpect is paid them, as being the birds that fed the prophet Elijah in the wilderneſs. This prepoſſeſſion in favour of the raven is of very ancient date, as the Romans themſelves, who thought the bird ominous, paid it, from motives of fear, the moſt profound veneration. One of theſe that had been kept in the temple of Caſtor, as Pliny informs us, flew down into the ſhop of a taylor, who took much delight in the viſits of his new acquaintance. He taught the bird ſeveral tricks; but particularly to pronounce the names of the emperor Tiberius and the whole royal family. The taylor was beginning to grow rich by thoſe who came to ſee this wonderful raven, till an envious neighbour, diſpleaſed at the taylor's ſucceſs, killed the bird, and deprived the taylor of his future hopes of fortune. The Romans, however, took the poor taylor's part; they puniſhed the man who offer-

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ed the injury, and gave the raven all the honours of a magnificent interment.

Birds in general live longer than quadrupedes; and the raven is said to be one of the most long-lived of the number. Hesiod asserts that a raven will live nine times as long as a man; but though this is fabulous, it is certain that some of them have been known to live near an hundred years. This animal seems possessed of those qualities that generally produce longevity, a good appetite, and great exercise. In clear weather, the ravens fly in pairs to a great height, making a deep loud noise, different from that of their usual croaking.

The carrion-crow resembles the raven in its appetites, its laying, and manner of bringing up its young. It only differs in being less bold, less docile, and less favoured by mankind.

The rook leads the way in another, but a more harmless train, that have no carnivorous appetites, but only feed upon insects and corn. The Royston crow is about the size of the two former. The breast, belly, back, and upper part of the neck, being of a pale ash-colour; the head and wings glossed over with a fine blue. He is a bird of passage, visiting this kingdom in the beginning of winter, and leaving it in the spring. He breeds, however, in different parts of the British dominions; and his nest is common enough in trees in Ireland. The jack-daw is

black, like all the former, but aſh-coloured on the breaſt and belly. He is not above the ſize of a pigeon. He is docile and loquacious. His head is large for the ſize of his body, which, as has been remarked, argues him ingenious and crafty. He builds in ſteeples, old caſtles, and high rocks, laying five or ſix eggs in a ſeaſon. The Corniſh chough is like a jack-daw, but bigger, and almoſt the ſize of a crow. The feet and legs are long like thoſe of a jack-daw, but of a red colour; and the plumage is black all over. It frequents rocks, old caſtles, and churches, by the ſea-ſide, like the daw; and with the ſame noiſy aſſiduity. It is only ſeen along the weſtern coaſts of England. Theſe are birds very ſimilar in their manners, feeding on grain and inſects, living in ſociety, and often ſuffering general caſtigation from the flock for the good of the community.

The rook, as is well known, builds in woods and foreſts in the neighbourhood of man, and ſometimes makes choice of groves in the very midſt of cities for the place of its retreat and ſecurity. In theſe it eſtabliſhes a kind of legal conſtitution, by which all intruders are excluded from coming to live among them, and none ſuffered to build but acknowledged natives of the place. I have often amuſed myſelf with obſerving their plan of policy from my window in the Temple, that looks upon a grove where they

they have made a colony in the midſt of the city. At the commencement of ſpring, the rookery, which during the continuance of winter ſeemed to have been deſerted, or only guarded by about five or ſix, like old ſoldiers in a garriſon, now begins to be once more frequented; and in a ſhort time all the buſtle and hurry of buſineſs is fairly commenced. Where theſe numbers reſided during the winter is not eaſy to gueſs; perhaps in the trees of hedge-rows, to be nearer their food. In ſpring, however, they cultivate their native trees; and, in the places where they were themſelves hatched, they prepare to propagate a future progeny.

They keep together in pairs; and when the offices of courtſhip are over, they prepare for making their neſts and laying. The old inhabitants of the place are all already provided; the neſt which ſerved them for years before, with a little trimming and dreſſing will ſerve very well again; the difficulty of neſtling lies only upon the young ones who have no neſt, and muſt therefore get up one as well as they can. But not only the materials are wanting, but alſo the place in which to fix it. Every part of a tree will not do for this purpoſe, as ſome branches may not be ſufficiently forked; others may not be ſufficiently ſtrong; and ſtill others may be too much expoſed to the rockings of the wind. The male and female upon this occaſion

occaſion are, for ſome days, ſeen examining all the trees of the grove very attentively; and when they have fixed upon a branch that ſeems fit for their purpoſe, they continue to ſit upon and obſerve it very ſedulouſly for two or three days longer. The place being thus determined upon, they begin to gather the materials for their neſt; ſuch as ſticks and fibrous roots, which they regularly diſpoſe in the moſt ſubſtantial manner. But here a new and unexpected obſtacle ariſes. It often happens that the young couple have made choice of a place too near the manſion of an older pair, who do not chuſe to be incommoded by ſuch troubleſome neighbours. A quarrel therefore inſtantly enſues; in which the old ones are always victorious.

The young couple, thus expelled, are obliged again to go through the fatigues of deliberating, examining, and chuſing; and having taken care to keep their due diſtance, the neſt begins again, and their induſtry deſerves commendation. But their alacrity is often too great in the beginning; they ſoon grow weary of bringing the materials of their neſt from diſtant places; and they very eaſily perceive that ſticks may be provided nearer home, with leſs honeſty indeed, but ſome degree of addreſs. Away they go, therefore, to pilfer as faſt as they can; and wherever they ſee a neſt unguarded, they take

care

care to rob it of the very choiceſt ſticks of which it is compoſed. But theſe thefts never go unpuniſhed; and probably upon complaint being made there is a general puniſhment inflicted. I have ſeen eight or ten rooks come upon ſuch occaſions, and ſetting upon the new neſt of the young couple all at once, tear it in pieces in a moment.

At length, therefore, the young pair find the neceſſity of going more regularly and honeſtly to work. While one flies to fetch the materials, the other ſits upon the tree to guard it; and thus in the ſpace of three or four days, with a ſkirmiſh now and then between, the pair have fitted up a commodious neſt, compoſed of ſticks without, and of fibrous roots and long graſs within. From the inſtant the female begins to lay, all hoſtilities are at an end; not one of the whole grove, that a little before treated her ſo rudely, will now venture to moleſt her; ſo that ſhe brings forth her brood with patient tranquillity. Such is the ſeverity with which even native rooks are treated by each other; but if a foreign rook ſhould attempt to make himſelf a denizen of their ſociety, he would meet with no favour; the whole grove would at once be up in arms againſt him, and expel him without mercy.

In ſome countries theſe birds are conſidered as a benefit, in others as a nuiſance: their chief food

food is the worm of the dorbeetle and corn; thus they may be ſaid to do as much ſervice by deſtroying that noxious inſect, as they do injury by conſuming the produce of the huſbandman's induſtry.

To this tribe of the crow-kind, ſome foreign ſorts might be added: I will take notice only of one, which, from the extraordinary ſize and faſhion of its bill, muſt not be paſſed in ſilence. This is the Calao, or horned Indian raven, which exceeds the common raven in ſize, and habits of depredation. But what he differs in from all other birds is the beak, which, by its length and curvature at the end, appears deſigned for rapine; but then it has a kind of horn ſtanding out from the top, which looks ſomewhat like a ſecond bill, and gives this bird, otherwiſe fierce and ugly, a very formidable appearance. The horn ſprings out of the forehead, and grows to the upper part of the bill, being of great bulk; ſo that near the forehead it is four inches broad, not unlike the horn of the rhinoceros, but more crooked at the tip. Were the body of the bird anſwerable in ſize to the head, the calao would exceed in magnitude even the vulture or the eagle. But the head and beak are out of all proportion, the body being not much larger than that of an hen. Yet even here there are varieties; for in ſuch of thoſe birds as come from different parts of Africa, the body is proportionable

portionable to the beak; in ſuch as come from the Molucca Iſlands, the beak bears no proportion to the body. Of what uſe this extraordinary excreſcence is to the bird, is not eaſy to determine; it lives, like others of its kind, upon carrion, and ſeldom has a living enemy to cope with: Nature ſeems to ſport in the production of many animals, as if ſhe were willing to exhibit inſtances as well of variety as œconomy in their formation.

CHAP. III.

Of the Magpie, and its Affinities.

THERE are ſuch a variety of birds that may be diſtributed under this head, that we muſt not expect very preciſe ideas of any. To have a ſtraight ſtrong bill, legs formed for hopping, a body of about the ſize of a magpie, and party-coloured plumage, are the only marks by which I muſt be contented to diſtinguiſh this numerous fantaſtic tribe, that add to the beauty, though not to the harmony of our landſcapes. In fact, their chattering every where diſturbs the melody of the leſſer warblers; and their noiſy courtſhip not a little damps the ſong of the linnet and the nightingale.

However, we have very few of this kind in our woods, compared to thoſe in the neighbourhood of

of the line. There they not only paint the ſcene with the beauty and the variety of their plumage, but ſtun the ear with their vociferation. In thoſe luxurious foreſts, the ſinging birds are ſcarce ever heard, but a hundred varieties of the pie, the jay, the roller, the chatterer, and the toucan, are continually in motion, and with their illuſive mockeries diſturb or divert the ſpectator, as he happens to be diſpoſed.

The Magpie is the chief of this kind with us, and is too well known to need a deſcription. Indeed, were its other accompliſhments equal to its beauty, few birds could be put in competition. Its black, its white, its green and purple, with the rich and gilded combination of the gloſſes on its tail, are as fine as any that adorn the moſt beautiful of the feathered tribe. But it has too many of the qualities of a beau, to depreciate theſe natural perfections: vain, reſtleſs, loud, and quarrelſome, it is an unwelcome intruder every where; and never miſſes an opportunity, when it finds one, of doing miſchief.

The magpie bears a great reſemblance to the butcher-bird in its bill, which has a ſharp proceſs near the end of the upper chap, as well as in the ſhortneſs of its wings, and the form of the tail, each feather ſhortening from the two middlemoſt. But it agrees ſtill more in its food, living not only upon worms and inſects, but

alſo

alſo upon ſmall birds when they can be ſeized. A wounded lark, or a young chicken ſeparated from the hen, are ſure plunder; and the magpie will even ſometimes ſet upon and ſtrike a black-bird.

The ſame inſolence prompts it to teize the largeſt animals when its inſults can be offered with ſecurity. They often are ſeen perched upon the back of an ox or a ſheep, pecking up the inſects to be found there, chattering and tormenting the poor animal at the ſame time, and ſtretching out their necks for combat, if the beaſt turns its head backward to reprehend them. They ſeek out alſo the neſts of birds; and, if the parent eſcapes, the eggs make up for the deficiency: the thruſh and the black-bird are but too frequently robbed by this aſſaſſin, and this in ſome meaſure cauſes their ſcarcity.

No food ſeems to come amiſs to this bird; it ſhares with ravens in their carrion, with rooks in their grain, and with the cuckoo in birds eggs: but it ſeems poſſeſſed of a providence ſeldom uſual with gluttons; for when it is ſatisfied for the preſent, it lays up the remainder of the feaſt for another occaſion. It will even in a tame ſtate hide its food when it has done eating, and after a time return to the ſecret hoard with renewed appetite and vociferation.

In all its habits it diſcovers a degree of inſtinct

ſtinct unuſual to other birds. Its neſt is not leſs remarkable for the manner in which it is compoſed than for the place the magpie takes to build it in. The neſt is uſually placed conſpicuous enough, either in the middle of ſome hawthorn buſh, or on the top of ſome high tree. The place, however, is always found difficult of acceſs; for the tree pitched upon uſually grows in ſome thick hedge-row, fenced by brambles at the root; or ſometimes one of the higher buſhes is fixed upon for the purpoſe. When the place is thus choſen as inacceſſible as poſſible to men, the next care is to fence the neſt above, ſo as to defend it from all the various enemies of air. The kite, the crow, and the ſparrow-hawk, are to be guarded againſt; as their neſts have been ſometimes plundered by the magpie, ſo it is reaſonably feared that they will take the firſt opportunity to retaliate. To prevent this, the magpie's neſt is built with ſurpriſing labour and ingenuity.

The body of the neſt is compoſed of hawthorn branches; the thorns ſticking outward, but well united together by their mutual inſertions. Within it is lined with fibrous roots, wool, and long graſs, and then nicely plaiſtered all round with mud and clay. The body of the neſt being thus made firm and commodious, the next work is to make the canopy which is to defend it above. This is compoſed of the

ſharpeſt

ſharpeſt thorns, wove together in ſuch a manner as to deny all entrance except at the door, which is juſt large enough to permit egreſs and regreſs to the owners. In this fortreſs the male and female hatch and bring up their brood with ſecurity, ſheltered from all attacks but thoſe of the climbing ſchool-boy, who often finds his torn and bloody hands too dear a price for the eggs or the young ones. The magpie lays ſix or ſeven eggs, of a pale green colour, ſpotted with brown.

This bird, in its domeſtic ſtate, preſerves its natural character with ſtrict propriety. The ſame noiſy, miſchievous habits attend it to the cage that marked it in the woods; and being more cunning, ſo it is alſo a more docile bird than any other taken into keeping. Thoſe who are deſirous of teaching it to ſpeak, have a fooliſh cuſtom of cutting its tongue, which only puts the poor animal to pain, without improving its ſpeech in the ſmalleſt degree. Its ſpeaking is ſometimes very diſtinct; but its ſounds are too thin and ſharp to be an exact imitation of the human voice, which the hoarſe raven and parrot can counterfeit more exactly.

To this tribe we may refer the Jay, which is one of the moſt beautiful of the Britiſh birds. The forehead is white, ſtreaked with black; the head is covered with very long feathers, which it can erect into a creſt at pleaſure; the whole

whole neck, back, breaſt, and belly, are of a faint purple, daſhed with grey; the wings are moſt beautifully barred with a lovely blue, black, and white; the tail is black, and the feet of a pale brown. Like the magpie, it feeds upon fruits, will kill ſmall birds, and is extremely docile.

The Chatterer alſo, which is a native of Germany, may be placed in this rank; and is ſomewhat leſs than the former. It is variegated with a beautiful mixture of colours; red, aſh-colour, cheſnut, and yellow: but what diſtinguiſhes it from all other birds, are the horny appendages from the tips of ſeven of the leſſer quill feathers, which ſtand bare of beards, and have the colour and gloſs of the beſt red ſealing-wax.

The Roller is not leſs beautiful than any of the former. The breaſt and belly are blue; the head green; and the wings variegated with blue, black, and white. But it may be diſtinguiſhed from all others by a ſort of naked tubercles or warts near the eyes, which ſtill farther contribute to encreaſe its beauty.

To this claſs may be added a numerous liſt from all the tropical foreſts of the eaſt and weſt; where the birds are remarkable for diſcordant voices and brilliant plumage. I will fix only upon one, which is the moſt ſingular of all the feathered creation. This is the Toucan, a bird of

of the pie kind, whoſe bill is nearly as large as the reſt of its whole body.

Of this extraordinary bird there are four or five varieties. I will only deſcribe the red-beaked toucan; and as the figure of this bird makes the principal part of its hiſtory, I will follow Edwards through all the minutiæ of its ſingular conformation. It is about the ſize of and ſhaped like a jack-daw, with a large head to ſupport its monſtrous bill: this bill, from the angles of the mouth to its point, is ſix inches and an half; and its breadth, in the thickeſt part, is a little more than two. Its thickneſs near the head, is one inch and a quarter; and it is a little rounded along the top of the upper chap, the under ſide being round alſo; the whole of the bill extremely ſlight, and a little thicker than parchment. The upper chap is of a bright yellow, except on each ſide, which is of a fine ſcarlet colour; as is alſo the lower chap, except at the baſe, which is purple. Between the head and the bill there is a black line of ſeparation all round the baſe of the bill; in the upper part of which the noſtrils are placed, and are almoſt covered with feathers; which has occaſioned ſome writers to ſay, that the toucan has no noſtrils. Round the eyes, on each ſide of the head, is a ſpace of blueiſh ſkin, void of feathers, above which the head is black, except a white ſpot on each ſide joining to the baſe of the upper chap.

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The hinder part of the neck, the back, wings, tail, belly, and thighs, are black. The under ſide of the head, throat, and the beginning of the breaſt, are white. Between the white on the breaſt, and the black on the belly, is a ſpace of red feathers, in the form of a new moon, with its horns upwards. The legs, feet and claws, are of an aſh-colour; and the toes ſtand like thoſe of parrots, two before, and two behind.

It is reported, by travellers, that this bird, though furniſhed with ſo formidable a beak, is harmleſs and gentle, being ſo eaſily made tame, as to ſit and hatch its young in houſes. It feeds chiefly upon pepper, which it devours very greedily, gorging itſelf in ſuch a manner, that it voids it crude and unconcocted. This, however, is no objection to the natives from uſing it again; they even prefer it before that pepper which is freſh gathered from the tree: and ſeem perſuaded that the ſtrength and heat of the pepper is qualified by the bird, and that all its noxious qualities are thus exhauſted.

Whatever be the truth of this report, nothing is more certain than that the toucan lives only upon a vegetable diet; and in a domeſtic ſtate, to which it is frequently brought in the warm countries where it is bred, it is ſeen to prefer ſuch food to all other. Pozzo, who bred one tame, aſſerts, that it leaped up and down, wagged

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the tail, and cried with a voice reſembling that of a magpie. It fed upon the ſame things that parrots do; but was moſt greedy of grapes, which, being plucked off one by one, and thrown into the air, it would moſt dexterouſly catch before they fell to the ground. Its bill, he adds, was hollow, and upon that account very light, ſo that it had but little ſtrength in ſo apparently formidable a weapon: nor could it peck or ſtrike ſmartly therewith. But its tongue ſeemed to aſſiſt the efforts of this unweildy machine: it was long, thin and flat, not unlike one of the feathers on the neck of a dunghill cock; this it moved up and down; and often extended five or ſix inches from the bill. It was of a fleſh-colour, and very remarkably fringed on each ſide with very ſmall filaments, exactly reſembling a feather.

It is probable that this long tongue has greater ſtrength than the thin hollow beak that contains it. It is likely that the beak is only a kind of ſheath for this peculiar inſtrument, uſed by the toucan, not only in making itſelf a neſt, but alſo in obtaining its proviſion. Nothing is more certain, than that this bird builds its neſt in holes of trees, which have been previouſly ſcooped out for this purpoſe; and it is not very likely that ſo feeble a bill could be very ſerviceable in working upon ſuch hard materials.

Be this as it will, there is no bird ſecures its young better from external injury than the toucan. It has not only birds, men, and ſerpents to guard againſt, but a numerous tribe of monkies, ſtill more prying, miſchievous and hungry than all the reſt. The toucan, however, ſcoops out its neſt into the hollow of ſome tree, leaving only a hole large enough to go in and out at. There it ſits, with its great beak, guarding the entrance; and if the monkey ventures to offer a viſit of curioſity, the toucan gives him ſuch a welcome, that he preſently thinks proper to pack off, and is glad to eſcape with ſafety.

This bird is only found in the warm climates of South America, where it is in great requeſt, both for the delicacy of its fleſh, which is tender and nouriſhing, and for the beauty of its plumage, particularly the feathers of the breaſt. The ſkin of this part the Indians pluck off, and, when dry, glue to their cheeks; and this they conſider as an irreſiſtible addition to their beauty.

CHAP.

CHAP. IV.

Of the Wood-pecker, and its Affinities.

WE come now to the numerous tribe of Wood-peckers; a claſs eaſily diſtinguiſhable from all others, both for their peculiar formation, their method of procuring food, and their manner of providing a place of ſafety for their young. Indeed, no other claſs of birds ſeems more immediately formed for the method of life they purſue, being fitted by Nature, at all points, for the peculiarity of their condition. They live chiefly upon the inſects contained in the body of trees; and for this purpoſe are furniſhed with a ſtraight, hard, ſtrong, angular and ſharp bill, made for piercing and boring. They have a tongue of a very great length; round, ending in a ſharp, ſtiff, bony thorn, dentated on each ſide, to ſtrike ants and inſects when diſlodged from their cells. Their legs are ſhort and ſtrong, for the purpoſes of climbing. Their toes ſtand two forward, and two backward; which is particularly ſerviceable in holding by branches of trees. They have hard ſtiff tails, to lean upon when climbing. They feed only upon inſects, and want that inteſtine, which anatomiſts call the cæcum; a circumſtance peculiar to this tribe only.

Of this bird there are many kinds, and many varieties in each kind. They form large colonies in the foreſts of every part of the world. They differ in ſize, colour, and appearance; and agree only in the marks above-mentioned, or in thoſe habits which reſult from ſo peculiar a conformation. Inſtead, therefore, of deſcending into a minute diſcrimination of every ſpecies, let us take one for a pattern, to which all the reſt will be found to bear the ſtrongeſt affinity. Words can but feebly deſcribe the plumage of a bird; but it is the province of hiſtory to enter into a detail of every animal's purſuits and occupations.

The Green Wood-ſpite or Wood-pecker is called the Rain Fowl in ſome parts of the country; becauſe, when it makes a greater noiſe than ordinary, it is ſuppoſed to foretell rain. It is about the ſize of a jay; the throat, breaſt, and belly are of a pale greeniſh colour; and the back, neck, and covert feathers of the wings, are green. But the tongue of this little animal makes its moſt diſtinguiſhed characteriſtic, as it ſerves for its ſupport and defence. As was ſaid above, the wood-pecker feeds upon inſects; and particularly on thoſe which are lodged in the body of hollow or of rotting trees. The tongue is its inſtrument for killing and procuring this food; which cannot be found in great plenty. This is round, ending in a ſtiff, ſharp, bony tip,

dentated

dentated on both ſides, like the beard of an arrow; and this it can dart out three or four inches from the bill, and draw in again at pleaſure. Its prey is thus transfixed, and drawn into the bill, which, when ſwallowed, the dart is again launched at freſh game. Nothing has employed the attention of the curious in this part of anatomy, more than the contrivance by which the tongue of this bird performs its functions with ſuch great celerity. The tongue is drawn back into the bill by the help of two ſmall round cartilages, faſtened into the forementioned bony tip, and running along the length of the tongue. Theſe cartilages, from the root of the tongue, take a circuit beyond the ears; and being reflected backwards to the crown of the head, make a large bow. The muſcular, ſpongy fleſh of the tongue, encloſes theſe cartilages, like a ſheath; and is ſo made, that it may be extended or contracted like a worm. The cartilages indeed have muſcles accompanying them along their whole length backwards. But there is ſtill another contrivance; for there is a broad muſcle, joining the cartilages to the bones of the ſkull, which, by contracting or dilating, forces the cartilages forward through the tongue, and then forces the tongue and all through the bill, to be employed for the animal's preſervation, in piercing its prey.

Such is the inſtrument with which this bird is provided; and this the manner in which this inſtrument is employed. When a wood-pecker, by its natural ſagacity, finds out a rotten hollow tree, where there are worms, ants eggs, or inſects, it immediately prepares for its operations. Reſting by its ſtrong claws, and leaning on the thick feathers of its tail, it begins to bore with its ſharp ſtrong beak, until it diſcloſes the whole internal habitation. Upon this, either through pleaſure at the ſight of its prey, or with a deſire to alarm the inſect colony, it ſends forth a loud cry, which throws terror and confuſion into the whole inſect tribe. They creep hither and thither, ſeeking for ſafety; while the bird luxurioufly feaſts upon them at leiſure, darting its tongue with unerring certainty, and devouring the whole brood.

The wood-pecker, however, does not confine its depredations ſolely to trees, but ſometimes lights upon the ground, to try its fortune at an ant-hill. It is not ſo ſecure of prey there as in the former caſe, although the numbers are much greater. They lie generally too deep for the bird to come at them; and it is obliged to make up by ſtratagem the defect of power. The wood-pecker firſt goes to their hills, which it pecks, in order to call them abroad; it then thruſts out its long red tongue,

which

which being like a worm, and reſembling their uſual prey, the ants come out to ſettle upon in great numbers; however, the bird watching the propereſt opportunity, withdraws its tongue at a jerk, and devours the devourers. This ſtratagem it continues till it has alarmed their fears; or till it is quite ſatisfied.

As the wood-pecker is obliged to make holes in trees to procure food, ſo is it alſo to make cavities ſtill larger to form its neſt and to lay in. This is performed, as uſual, with the bill; although ſome have affirmed that the animal uſes its tongue, as a gimblet, to bore with. But this is a miſtake; and thoſe that are curious, may often hear the noiſe of the bill making its way in large woods and foreſts. The wood-pecker chuſes, however, for this purpoſe, trees that are decayed, or wood that is ſoft, like beech, elm and poplar. In theſe, with very little trouble, it can make holes as exactly round as a mathematician could with compaſſes. One of theſe holes the bird generally chuſes for its own uſe, to neſtle, and bring up its young in: but as they are eaſily made, it is delicate in its choice, and often makes twenty before one is found fit to give entire ſatisfaction. Of thoſe which it has made and deſerted, other birds, not ſo good borers, and leſs delicate in their choice, take poſſeſſion. The jay and the ſtarling lay their eggs in theſe holes; and bats

are now and then found in peaceable poſſeſſion. Boys ſometimes have thruſt in their hands with certain hopes of plucking out a bird's egg; but, to their great mortification, have had their fingers bitten by a bat at the bottom.

The wood-pecker takes no care to line its neſt with feathers or ſtraw; its eggs are depoſited in the hole, without any thing to keep them warm, except the heat of the parent's body. Their number is generally five or ſix; always white, oblong, and of a middle ſize. When the young are excluded, and before they leave the neſt, they are adorned with a ſcarlet plumage under the throat, which adds to their beauty.

In our climate, this bird is contented with ſuch a wainſcot habitation as has been deſcribed for its young; but in the warmer regions of Guinea and Braſil, they take a very different method to protect and hatch their naſcent progeny. A traveller who walks into the foreſts of thoſe countries, among the firſt ſtrange objects that excite curioſity, is ſtruck with the multitude of birds neſts hanging at the extremity of almoſt every branch. Many other kinds of birds build in this manner; but the chief of them are of the wood-pecker kind: and indeed there is not, in the whole hiſtory of nature, a more ſingular inſtance of the ſagacity of thoſe little animals in protecting themſelves

ſelves againſt ſuch enemies as they have moſt occaſion to fear. In cultivated countries, a great part of the caution of the feathered tribe is to hide or defend their neſts from the invaſions of man, as he is their moſt dreaded enemy. But in the depth of thoſe remote and ſolitary foreſts, where man is but ſeldom ſeen, the little bird has nothing to apprehend from man. The parent is careleſs how much the neſt is expoſed to general notice; ſatisfied if it be out of the reach of thoſe rapacious creatures that live by robbery and ſurprize. If the monkey or the ſnake can be guarded againſt, the bird has no other enemies to fear: for this purpoſe, its neſt is built upon the depending points of the moſt outward branches of a tall tree, ſuch as the banana or the plantane. On one of thoſe immenſe trees, is ſeen the moſt various and the moſt inimical aſſemblage of creatures that can be imagined. The top is inhabited by monkies of ſome particular tribe, that drive off all others; lower down twine about the great trunk numbers of the larger ſnakes, patiently waiting till ſome unwary animal comes within the ſphere of their activity; and at the edges of the tree hang theſe artificial neſts, in great abundance, inhabited by birds of the moſt delightful plumage.

The neſt is uſually formed in this manner: when the time of incubation approaches, they fly buſily about, in queſt of a kind of moſs,

called, by the Engliſh inhabitants of thoſe countries, *old man's beard.* It is a fibrous ſubſtance, and not very unlike hair, which bears being moulded into any form, and ſuffers being glued together. This, therefore, the little woodpecker, called by the natives of Braſil the Guiratemga, firſt glues by ſome viſcous ſubſtance, gathered in the foreſt, to the extremeſt branch of a tree; then building downward, and ſtill adding freſh materials to thoſe already procured, a neſt is formed, that depends, like a pouch, from the point of the branch; the hole to enter at, is on the ſide; and all the interior parts are lined with the finer fibres of the ſame ſubſtance, which compoſe the whole.

Such is the general contrivance of theſe hanging neſts; which are made, by ſome other birds, with ſtill ſuperior art. A little bird of the Groſbeak kind, in the Philippine Iſlands, makes its neſt in ſuch a manner that there is no opening but from the bottom. At the bottom the bird enters, and goes up through a funnel, like a chimney, till it comes to the real door of the neſt, which lies on one ſide, and only opens into this funnel.

Some birds glue their neſt to the leaf of the banana-tree, which makes two ſides of their little habitation; while the other two are artificially compoſed by their own induſtry. But

theſe,

theſe, and all of the kind, are built with the ſame precautions to guard the young againſt the depredations of monkies and ſerpents, which abound in every tree. The neſt hangs there, before the ſpoilers, a tempting object, which they can only gaze upon, while the bird flies in and out, without danger or moleſtation, from ſo formidable a vicinity.'

CHAP. V.

Of the Bird of Paradiſe, and its Varieties.

THERE are few birds that have more deceived and puzzled the learned than this. Some have deſcribed it as an inhabitant of the air, living only upon the dew of heaven, and never reſting below; others have acquieſced in the latter part of its hiſtory, but have given it flying inſects to feed on. Some have aſſerted that it was without feet, and others have ranked it among the birds of prey.

The great beauty of this bird's plumage, and the deformity of its legs, ſeem to have given riſe to moſt of theſe erroneous reports. The native ſavages of the Molucca Iſlands, of which it is an inhabitant, were very little ſtudious of natural hiſtory; and, perceiving the inclination the Europeans had for this beautiful bird, carefully cut off its legs before they brought it to market;

thus concealing its greateſt deformity, they conſidered themſelves entitled to riſe in their demands when they offered it for ſale. One deceit led on to another; the buyer, finding the bird without legs, naturally enquired after them; and the ſeller as naturally began to aſſert that it had none. Thus far the European was impoſed upon by others; in all the reſt he impoſed upon himſelf. Seeing ſo beautiful a bird without legs, he concluded that it could live only in air, where legs were unneceſſary. The extraordinary ſplendour of its plumage aſſiſted this deception; and as it had heavenly beauty, ſo it was aſſerted to have an heavenly reſidence. From thence its name, and all the falſe reports that have been propagated concerning it.

Error, however, is ſhort-lived; and time has diſcovered that this bird not only has legs, but very large ſtrong ones for its ſize. Credulity when undeceived runs into the oppoſite extreme; and ſoon after this harmleſs bird was branded with the character of being rapacious, of deſtroying all thoſe of ſmaller ſize, and, from the amazing rapidity of its flight, as qualified peculiarly for extenſive rapine. The real hiſtory of this pretty animal is at preſent tolerably well known; and it is found to be as harmleſs as it is beautiful.

There are two kinds of the Bird of Paradiſe; one about the ſize of a pigeon, which is more common;

common; the other not much larger than a lark, which has been described more imperfectly. They are both sufficiently distinguished from all other birds, not only by the superior vivacity of their tints, but by the feathers of the tail, there being two long slender filaments growing from the upper part of the rump, these are longer than the bird's body, and bearded only at the end. By this mark the bird of paradise may be easily known, but still more easily by its gaudy livery, which being so very brilliant, demands to be minutely described.

This bird appears to the eye as large as a pigeon, though in reality the body is not much greater than that of a thrush. The tail, which is about six inches, is as long as the body; the wings are large, compared with the bird's other dimensions. The head, the throat, and the neck are of a pale gold-colour. The base of the bill is surrounded by black feathers, as also the side of the head and throat, as soft as velvet, and changeable like those on the neck of a mallard. The hinder part of the head is of a shining green, mixed with gold. The body and wings are chiefly covered with beautiful brown, purple and gold feathers. The uppermost part of the tail-feathers are of a pale yellow, and those under them white, and longer than the former; for which reason the hinder part of the tail appears to be all white. But what chiefly excites curiosity

curioſity are, the two long naked feathers above-mentioned, which ſpring from the upper part of the rump above the tail, and which are uſually about three feet long. Theſe are bearded only at the beginning and the end; the whole ſhaft for above two feet nine inches being of a deep black, while the feathered extremity is of a changeable colour, like the mallard's neck.

This bird, which for beauty exceeds all others of the pie kind, is a native of the Molucca Iſlands, but found in greateſt numbers in that of Aro. There, in the delightful and ſpicy woods of the country, do theſe beautiful creatures fly in large flocks; ſo that the groves which produce the richeſt ſpices produce the fineſt birds alſo. The inhabitants themſelves are not inſenſible of the pleaſure theſe afford, and give them the name of God's birds, as being ſuperior to all others that he has made. They live in large flocks, and at night generally perch upon the ſame tree. They are called by ſome, the Swallows of Ternate, from their rapid flight, and from their being continually on the wing in purſuit of inſects, their uſual prey.

As the country where they are bred has its tempeſtuous ſeaſon, when rains and thunders continually diſturb the atmoſphere, theſe birds are then but ſeldom ſeen. It is thought that they then fly to other countries, where their food

appears

appears in greater abundance; for, like ſwallows, they have their ſtated times of return. In the beginning of the month of Auguſt, they are ſeen in great numbers flying together; and, as the inhabitants would have us believe, following their king, who is diſtinguiſhed from the reſt by the luſtre of his plumage, and that reſpect and veneration which is paid him. In the evening they perch upon the higheſt trees of the foreſt, particularly one which bears a red berry, upon which they ſometimes feed, when other food fails them. In what manner they breed, or what may be the number of their young, as yet remains for diſcovery.

The natives, who make a trade of killing and ſelling theſe birds to the Europeans, generally conceal themſelves in the trees where they reſort, and having covered themſelves up from ſight in a bower made of the branches, they ſhoot at the birds with reedy arrows; and, as they aſſert, if they happen to kill the king, they then have a good chance for killing the greateſt part of the flock. The chief mark by which they know the king is by the ends of the feathers in his tail, which have eyes like thoſe of a peacock. When they have taken a number of theſe birds, their uſual method is to gut them and cut off their legs; they then run a hot iron into the body, which dries up the internal moiſture; and filling the cavity with ſalts and ſpices, they

they ſell them to the Europeans for a perfect trifle.

CHAP. VI.

The Cuckoo, and its Varieties.

FROM a bird of which many fables have been reported, we paſs to another that has not given leſs ſcope to fabulous invention. The note of the Cuckoo is known to all the world; the hiſtory and nature of the bird itſelf ſtill remains in great obſcurity. That it devours its parent; that it changes its nature with the ſeaſon, and becomes a ſparrow-hawk; were fables invented of this bird, and are now ſufficiently refuted. But where it reſides in winter, or how it provides for its ſupply during that ſeaſon, ſtill continues undiſcovered.

This ſingular bird, which is ſomewhat leſs than a pigeon, ſhaped like a magpie, and of a greyiſh colour, is diſtinguiſhed from all other birds, by its round prominent noſtrils. Having diſappeared all the winter, it diſcovers itſelf in our country early in the ſpring, by its well known call. Its note is heard earlier or later as the ſeaſon ſeems to be more or leſs forward, and the weather more or leſs inviting. From the chearful voice of this bird the farmer may be inſtructed in the real advancement of the year.

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The fallibility of human calendars is but too well known; but from this bird's note the husbandman may be taught when to sow his most useful seeds, and do such work as depends upon a certain temperature of the air. These feathered guides come to us heaven-taught, and point out the true commencement of the season.

The cuckoo, that was silent some time after its appearance, begins at first feebly, and at very distant intervals, to give its call, which, as the summer advances, improves both in its frequency and loudness. This is an invitation to courtship, and used only by the male, who sits generally perched upon some dead tree, or bare bough, and repeats his song, which he loses as soon as the genial season is over. His note is pleasant though uniform; and, from an association of ideas, seldom occurs to the memory without reminding us of the sweets of summer. Custom too has affixed a more ludicrous association to this note; which, however, we that are bachelors need be in no pain about. This reproach seems to arise from this bird's making use of the bed or nest of another to deposit its own brood in.

However this may be, nothing is more certain than that the female makes no nest of her own. She repairs for that purpose to the nest of some other bird, generally the water-wagtail or hedge-

hedge-ſparrow, and having devoured the eggs of the owner, lays her own in their place. She uſually lays but one, which is ſpeckled, and of the ſize of a blackbird's. This the fond fooliſh bird hatches with great aſſiduity, and, when excluded, finds no difference in the great ill-looking changeling from her own. To ſupply this voracious creature, the credulous nurſe toils with unuſual labour, no way ſenſible that ſhe is feeding up an enemy to her race, and one of the moſt deſtructive robbers of her future progeny.

It was once doubted whether theſe birds were carnivorous; but Reaumur was at the pains of breeding up ſeveral, and found that they would not feed upon bread or corn; but fleſh and inſects were their favourite nouriſhment. He found it a very difficult taſk to teach them to peck; for he was obliged to feed them for a full month, after they were grown as big as the mother. Inſects, however, ſeemed to be their peculiar food when young; for they devoured fleſh by a kind of conſtraint, as it was always put into their mouths; but meal-worm inſects they flew to, and ſwallowed of their own accord moſt greedily. Indeed, their gluttony is not to be wondered at, when we conſider the capacity of their ſtomach, which is enormous, and reaches from the breaſt-bone to the vent. It is partly membranous, partly muſcular, and of a prodi-

a prodigious capacity; yet ſtill they are not to be ſuppoſed as birds of prey, for they have neither the ſtrength nor the courage. On the contrary, they are naturally weak and fearful, as appears by their flying from ſmall birds which every where purſue them. The young birds are brown mixed with black; and in that ſtate they have been deſcribed by ſome authors as old ones.

The cuckoo, when fledged and fitted for flight, follows its ſuppoſed parent but for a little time; its appetites for inſect food encreaſing, as it finds no great chance for a ſupply in imitating its little inſtructor, it parts good friends, the ſtep-child ſeldom offering any violence to its nurſe. Nevertheleſs, all the little birds of the grove ſeem to conſider the young cuckoo as an enemy, and revenge the cauſe of their kind by their repeated inſults. They purſue it wherever it flies, and oblige it to take ſhelter in the thickeſt branches of ſome neighbouring tree. All the ſmaller birds form the train of its purſuers; but the wry-neck, in particular, is found the moſt active in the chace; and from thence it has been called by many the cuckoo's attendant and provider. But it is very far from following with a friendly intention; it only purſues as an inſulter, or a ſpy, to warn all its little companions of the cuckoo's depredations.

Such are the manners of this bird while it continues to reſide, or to be ſeen amongſt us.

But

But early, at the approach of winter, it totally diſappears, and its paſſage can be traced to no other country. Some ſuppoſe that it lies hid in hollow trees; and others that it paſſes into warmer climates. Which of theſe opinions is true is very uncertain, as there are no facts related on either ſide that can be totally relied on. To ſupport the opinion that they remain torpid during the winter, at home, Willughby introduces the following ſtory, which he delivers upon the credit of another. "The ſervants of "a gentleman, in the country, having ſtocked "up, in one of their meadows, ſome old dry "rotten willows, thought proper, on a certain "occaſion, to carry them home. In heating a "ſtove, two logs of this timber were put into the "furnace beneath, and fire applied as uſual. But "ſoon, to the great ſurprize of the family, was "heard the voice of a cuckoo, ſinging three times "from under the ſtove. Wondering at ſo ex-"traordinary a cry in winter time, the ſervants "ran and drew the willow logs from the fur-"nace, and in the midſt of one of them ſaw "ſomething move: wherefore, taking an ax, they "opened the hole, and thruſting in their hands, "firſt they plucked out nothing but feathers; "afterwards they got hold of a living animal; "and this was the cuckoo, that had waked ſo "very opportunely for its own ſafety. It was, "indeed," continues our hiſtorian, "briſk and "lively,

"lively, but wholly naked and bare of feathers, "and without any winter proviſion in its hole. "This cuckoo the boys kept two years af- "wards alive in the ſtove; but whether "it repaid them with a ſecond ſong, the au- "thor of the tale has not thought fit to in- "form us."

The moſt probable opinion on this ſubject is, that as quails and woodcocks ſhift their habitations in winter, ſo alſo does the cuckoo; but to what country it retires, or whether it has been ever ſeen on its journey, are queſtions that I am wholly incapable of reſolving.

Of this bird there are many kinds in various parts of the world, not only differing in their colours but their ſize. Briſſon makes not leſs than twenty-eight ſorts of them; but what analogy they bear to our Engliſh cuckoo I will not take upon me to determine. He talks of one, particularly of Braſil, as making a moſt horrible noiſe in the foreſts; which, as it ſhould ſeem, muſt be a very different note from that by which our bird is diſtinguiſhed at home.

CHAP.

CHAP. VII.

Of the Parrot, and its Affinities.

THE Parrot is the beſt known among us of all foreign birds, as it unites the greateſt beauty with the greateſt docility. Its voice alſo is more like a man's than that of any other; the raven is too hoarſe, and the jay and magpie too ſhrill, to reſemble the truth; the parrot's note is of the true pitch, and capable of a number of modulations that even ſome of our orators might wiſh in vain to imitate.

The eaſe with which this bird is taught to ſpeak, and the great number of words which it is capable of repeating, are no leſs ſurpriſing. We are aſſured, by a grave writer, that one of theſe was taught to repeat a whole ſonnet from Petrarch: and that I may not be wanting in my inſtance, I have ſeen a parrot, belonging to a diſtiller, who had ſuffered pretty largely in his circumſtances from an informer who lived oppoſite him, very ridiculouſly employed. This bird was taught to pronounce the ninth commandment, *Thou ſhalt not bear falſe witneſs againſt thy neighbour*, with a very clear, loud, articulate voice. The bird was generally placed in its cage over-againſt the informer's houſe, and

delighted the whole neighbourhood with its perſevering exhortations.

Willughby tells a ſtory of a parrot, which is not ſo dull as thoſe uſually brought up when this bird's facility of talking happens to be the ſubject. "A parrot belonging to king Henry the "Seventh, who then reſided at Weſtminſter, in "his palace by the river Thames, had learned "to talk many words from the paſſengers as "they happened to take water. One day, ſport-"ing on its perch, the poor bird fell into the "water, at the ſame time crying out, as loud "as he could, *A boat! twenty pound for a boat!* "A waterman, who happened to be near, "hearing the cry, made to the place where the "parrot was floating, and taking him up re-"ſtored him to the king. As it ſeems the "bird was a favourite, the man inſiſted that he "ought to have a reward rather equal to his "ſervices than his trouble; and, as the parrot "had cried twenty pounds, he ſaid the king "was bound in honour to grant it. The king "at laſt agreed to leave it to the parrot's own "determination, which the bird hearing, cried "out, *Give the knave a groat.*"

The parrot, which is ſo common as a foreign bird with us, is equally ſo as an indigenous bird in the climates where it is produced. The foreſts ſwarm with them; and the rook is not better known with us than the parrot in almoſt every

every part of the Eaſt and Weſtern Indies. It is in vain that our naturaliſts have attempted to arrange the various ſpecies of this bird; new varieties daily offer to puzzle the ſyſtem-maker, or to demonſtrate the narrowneſs of his catalogues. Linnæus makes the number of its varieties amount to forty-ſeven; while Briſſon doubles the number, and extends his catalogue to ninety-five. Perhaps even this liſt might be encreaſed, were every accidental change of colour to be conſidered as conſtituting a new ſpecies. But, in fact, natural hiſtory gains little by theſe diſcoveries; and as its dominions are extended it becomes more barren. It is aſſerted, by ſenſible travellers, that the natives of Braſil can change the colour of a parrot's plumage by art. If this be true, and I am apt to lieve the information, they can make new ſpecies at pleaſure, and thus cut out endleſs work for our nomenclators at home.

Thoſe who uſually bring theſe birds over are content to make three or four diſtinctions, to which they give names; and with theſe diſtinctions I will content myſelf alſo. The large kind, which are of the ſize of a raven, are called Maccaws; the next ſize are ſimply called Parrots; thoſe which are entirely white are called Lories; and the leſſer ſize of all are called Parakeets. The difference between even theſe is rather in the ſize than in any other peculiar conformation,

conformation, as they are all formed alike, having toes two before and two behind for climbing and holding; ſtrong hooked bills for breaking open nuts, and other hard ſubſtances, on which they feed; and loud harſh voices, by which they fill their native woods with clamour.

But there are further peculiarities in the conformation: and firſt, their toes are contrived in a ſingular manner, which appears when they walk or climb, and when they are eating. For the firſt purpoſe they ſtretch two of their toes forward and two backward; but when they take their meat, and bring it to their mouths with their foot, they dextrouſly and nimbly turn the greater hind toe forward, ſo as to take a firmer graſp of the nut or the fruit they are going to feed on, ſtanding all the while upon the other leg. Nor even do they preſent their food in the uſual manner; for other animals turn their meat inwards to the mouth; but theſe, in a ſeemingly aukward poſition, turn their meat outwards, and thus hold the hardeſt nuts, as if in one hand, till with their bills they break the ſhell, and extract the kernel.

The bill is faſhioned with ſtill greater peculiarities; for the upper chap, as well as the lower, are both moveable. In moſt other birds the upper chap is connected, and makes but one piece with the ſkull; but in theſe, and in one or two ſpecies of the feathered tribe more,

the upper chap is connected to the bone of the head by a ſtrong membrane, placed on each ſide, that lifts and depreſſes it at pleaſure. By this contrivance they can open their bills the wider; which is not a little uſeful, as the upper chap is ſo hooked and ſo over-hanging, that, if the lower chap only had motion, they could ſcarce gape ſufficiently to take any thing in for their nouriſhment.

Such are the uſes of the beak and the toes when uſed ſeparately, but they are often employed both together when the bird is exerciſed in climbing. As theſe birds cannot readily hop from bough to bough, their legs not being adapted for that purpoſe, they uſe both the beak and the feet; firſt catching hold with the beak, as if with a hook, then drawing up the legs and faſtening them, then advancing the head and the beak again, and ſo putting forward the body and the feet alternately, till they attain the height they aſpire to.

The tongue of this bird ſomewhat reſembles that of a man; for which reaſon, ſome pretend that it is ſo well qualified to imitate the human ſpeech; but the organs by which theſe ſounds are articulated lie farther down in the throat, being performed by the great motion which the os hyoides has in theſe birds above others.

The parrot, though common enough in Europe, will not, however, breed here. The climate

climate is too cold for its warm conſtitution; and though it bears our winter when arrived at maturity, yet it always ſeems ſenſible of its rigour, and loſes both its ſpirit and appetite during the colder part of the ſeaſon. It then becomes torpid and inactive, and ſeems quite changed from that buſtling loquacious animal which it appeared in its native foreſts, where it is almoſt ever upon the wing. Notwithſtanding, the parrot lives even with us a conſiderable time, if it be properly attended to; and, indeed, it muſt be owned, that it employs but too great a part of ſome people's attention.

The extreme ſagacity and docility of the bird may plead as the beſt excuſe for thoſe who ſpend whole hours in teaching their parrots to ſpeak; and, indeed, the bird, on thoſe occaſions, ſeems the wiſeſt animal of the two. It at firſt obſtinately reſiſts all inſtruction; but ſeems to be won by perſeverance, makes a few attempts to imitate the firſt ſounds, and when it has got one word diſtinct, all the ſucceeding come with greater facility. The bird generally learns moſt in thoſe families where the maſter or miſtreſs have the leaſt to do; and becomes more expert, in proportion as its inſtructors are idly aſſiduous. In going through the towns of France ſome time ſince, I could not help obſerving how much plainer their parrots ſpoke than ours, and how very diſtinctly I underſtood their parrots ſpeak

French, when I could not underſtand our own, though they ſpoke my native language. I was at firſt for aſcribing it to the different qualities of the two languages, and was for entering into an elaborate diſcuſſion on the vowels and conſonants; but a friend that was with me ſolved the difficulty at once, by aſſuring me that the French women ſcarce did any thing elſe the whole day than ſit and inſtruct their feathered pupils; and that the birds were thus diſtinct in their leſſons in conſequence of continual ſchooling.

The parrots of France are certainly very expert, but nothing to thoſe of the Braſils, where the education of a parrot is conſidered as a very ſerious affair. The hiſtory of Prince Maurice's parrot, given us by Mr. Locke, is too well known to be repeated here; but Cluſius aſſures us that the parrots of that country are the moſt ſenſible and cunning of all animals not endued with reaſon. The great parrot, called the Aicurous, the head of which is adorned with yellow, red, and violet, the body green, the ends of the wings red, the feathers of the tail long and yellow; this bird, he aſſerts, which is ſeldom brought into Europe, is a prodigy of underſtanding. "A certain Braſilian woman, "that lived in a village two miles diſtant from "the iſland on which we reſided, had a parrot of "this kind which was the wonder of the place. "It ſeemed endued with ſuch underſtanding, as

" to diſcern and comprehend whatever ſhe ſaid
" to it. As we ſometimes uſed to paſs by that
" woman's houſe, ſhe uſed to call upon us to
" ſtop, promiſing, if we gave her a comb, or a
" looking-glaſs, that ſhe would make her parrot
" ſing and dance to entertain us. If we agreed
" to her requeſt, as ſoon as ſhe had pronounced
" ſome words to the bird, it began not only to
" leap and ſkip on the perch on which it ſtood,
" but alſo to talk and to whiſtle, and imitate the
" ſhoutings and exclamations of the Braſilians
" when they prepare for battle. In brief, when
" it came into the woman's head to bid it ſing,
" it ſang; to dance, it danced. But if, contrary
" to our promiſe, we refuſed to give the wo-
" man the little preſent agreed on, the parrot
" ſeemed to ſympathize in her reſentment, and
" was ſilent and immoveable; neither could we,
" by any means, provoke it to move either foot
" or tongue."

This ſagacity, which parrots ſhew in a domeſtic ſtate, ſeems alſo natural to them in their native reſidence among the woods. They live together in flocks, and mutually aſſiſt each other againſt other animals, either by their courage or their notes of warning. They generally breed in hollow trees, where they make a round hole, and do not line their neſt within. If they find any part of a tree beginning to rot from the breaking off a branch, or any ſuch accident,

this they take care to ſcoop, and to make the hole ſufficiently wide and convenient; but it ſometimes happens that they are content with the hole which a wood-pecker has wrought out with greater eaſe before them; and in this they prepare to hatch and bring up their young.

They lay two or three eggs; and probably the ſmaller kind may lay more; for it is a rule that univerſally holds through nature, that the ſmalleſt animals are always the moſt prolific; for being, from their natural weakneſs, more ſubject to devaſtation, Nature finds it neceſſary to repleniſh the ſpecies by ſuperior fecundity. In general, however, the number of their eggs is ſtinted to two, like thoſe of the pigeon, and they are about the ſame ſize. They are always marked with little ſpecks, like thoſe of a partridge; and ſome travellers aſſure us, that they are always found in the trunks of the talleſt, ſtraighteſt, and the largeſt trees. The natives of theſe countries, who have little elſe to do, are very aſſiduous in ſpying out the places where the parrot is ſeen to neſtle, and generally come with great joy to inform the Europeans, if there be any, of the diſcovery. As thoſe birds have always the greateſt docility that are taken young, ſuch a neſt is often conſidered as worth taking ſome trouble to be poſſeſſed of; and, for this purpoſe, the uſual method of coming

ing at the young is, by cutting down the tree. In the fall of the tree it often happens that the young parrots are killed; but if one of them ſurvives the ſhock, it is conſidered as a ſufficient recompence.

Such is the avidity with which theſe birds are ſought when young; for it is known they always ſpeak beſt when their ear has not been anticipated by the harſh notes of the wild ones. But as the natives are not able upon all occaſions to ſupply the demand for young ones, they are contented to take the old; and for that purpoſe ſhoot them in the woods with heavy arrows, headed with cotton, which knocks down the bird without killing it. The parrots thus ſtunned are carried home: ſome die, but others recover, and, by kind uſage and plentiful food, become talkative and noiſy.

But it is not for the ſake of their converſation alone that the parrot is ſought after among the ſavages; for, though ſome of them are but tough and ill-taſted, yet there are other ſorts, particularly of the ſmall parakeet tribe, that are very delicate food. In general it obtains, that whatever fruit or grain theſe birds moſtly feed upon, their fleſh partakes of the flavour, and becomes good or ill taſted, according to the quality of their particular diet. When the guava is ripe, they are at that ſeaſon fat and tender; if they feed upon the ſeed of the acajou, their fleſh

contracts an agreeable flavour of garlick; if they feed upon the seed of the spicy trees, their flesh then tastes of cloves and cinnamon; while, on the contrary, it is insupportably bitter if the berries they feed on are of that quality. The seed of the cotton-tree intoxicates them in the same manner as wine does man; and even wine itself is drunk by parrots, as Aristotle assures us, by which they are thus rendered more talkative and amusing. But of all food, they are fondest of the carthamus, or bastard saffron; which, though strongly purgative to man, agrees perfectly with their constitution, and fattens them in a very short time.

Of the parakeet kind in Brasil, Labat assures us, that they are the most beautiful in their plumage, and the most talkative birds in nature. They are very tame, and appear fond of mankind; they seem pleased with holding parley with him; they never have done; but while he continues to talk, answer him, and appear resolved to have the last word: but they are possessed of another quality which is sufficient to put an end to this association: their flesh is the most delicate imaginable, and highly esteemed by those who are fonder of indulging their appetites than their ears. The fowler walks into the woods, where they keep in abundance; but as they are green, and exactly the colour of the leaves among which they sit, he only hears their prattle,

rattle, without being able to see a single bird; he looks round him, sensible that his game is within gun-shot in abundance, but is mortified to the last degree that it is impossible to see them. Unfortunately for these little animals, they are restless and ever on the wing, so that in flying from one tree to another he has but too frequent opportunities of destroying them; for as soon as they have stripped the tree on which they sate of all its berries, some one of them flies off to another; and, if that be found fit for the purpose, it gives a loud call, which all the rest resort to. That is the opportunity the fowler has long been waiting for, he fires in among the flock while they are yet on the wing; and he seldom fails of bringing down a part of them. But it is singular enough to see them when they find their companions fallen. They set up a loud outcry, as if they were chiding their destroyer, and do not cease till they see him preparing for a second charge.

But, though there are so many motives for destroying these beautiful birds, they are in very great plenty; and in some countries on the coast of Guinea, they are considered by the Negroes as their greatest tormentors. The flocks of parrots persecute them with their unceasing screaming; and devour whatever fruits they attempt to produce by art in their little gardens. In other places they are not so destructive, but sufficiently

common; and, indeed, there is ſcarce a country of the tropical climates that has not many of the common kinds as well as ſome peculiarly its own. Travellers have counted more than an hundred different kinds on the continent of Africa only; there is one country in particular, north of the Cape of Good Hope, which takes its name from the multitude of parrots which are ſeen in its woods. There are white parrots ſeen in the burning regions of Ethiopia; in the Eaſt-Indies, they are of the largeſt ſize; in South America, they are docile and talkative; in all the iſlands of the Pacific Sea and the Indian Ocean, they ſwarm in great variety and abundance, and add to the ſplendour of thoſe woods which Nature has dreſſed in eternal green.

So generally are theſe birds known at preſent, and ſo great is their variety, that nothing ſeems more extraordinary than that there was but one ſort of them known among the ancients, and that at a time when they pretended to be maſters of the world. If nothing elſe could ſerve to ſhew the vanity of a Roman's boaſt, the parrot-tribe might be an inſtance, of which there are an hundred kinds now known, not one of which naturally breeds in the countries that acknowledged the Roman power. The green parakeet, with a red neck, was the firſt of this kind that was brought into Europe, and the only

only one that was known to the ancients from the time of Alexander the Great to the age of Nero. This was brought from India; and when afterwards the Romans began to ſeek and rummage through all their dominions, for new and unheard-of luxuries, they at laſt found out others in Gaganda, an iſland of Ethiopia, which they conſidered as an extraordinary diſcovery.

Parrots have uſually the ſame diſorders with other birds; and they have one or two peculiar to their kind. They are ſometimes ſtruck by a kind of apoplectic blow, by which they fall from their perches, and for a while ſeem ready to expire. The other is the growing of the beak, which becomes ſo very much hooked as to deprive them of the power of eating. Theſe infirmities, however, do not hinder them from being long-lived; for a parrot well kept will live five or ſix and twenty years.

CHAP. VIII.

The Pigeon, and its Varieties.

THIS is one of the birds which, from its great fecundity, we have, in ſome meaſure, reclaimed from a ſtate of nature, and taught to live in habits of dependence. Indeed, its fecundity ſeems to be encreaſed by human

cultivation, ſince thoſe pigeons that live in a wild ſtate, in the woods, are by no means ſo fruitful as thoſe in our pigeon-houſes nearer home. The power of encreaſe in moſt birds depends upon the quantity of their food; and it is ſeen, in more than one inſtance, that man, by ſupplying food in plenty, and allowing the animal at the ſame time a proper ſhare of freedom, has brought ſome of thoſe kinds which are known to lay but once a year, to become much more prolific.

The tame pigeon, and all its beautiful varieties, derive their origin from one ſpecies, the Stock Dove only, the Engliſh name, implying its being the ſtock or ſtem from whence the other domeſtic kinds have been propagated. This bird, in its natural ſtate, is of a deep bluiſh aſh-colour; the breaſt daſhed with a fine changeable green and purple; its wings marked with two black bars; the back white, and the tail barred near the end with black. Theſe are the colours of the pigeon in a ſtate of nature; and from theſe ſimple tints has man by art propagated a variety that words cannot deſcribe, nor even fancy ſuggeſt. However, Nature ſtill perſeveres in her great out-line; and though the form, colour, and even the fecundity of theſe birds may be altered by art, yet their natural manners and inclinations continue ſtill the ſame.

The

The ſtock-dove, in its native woods, differs from the ring-dove, a bird that has never been reclaimed, by its breeding in the holes of rocks and the hollows of trees. All other birds of the pigeon-kind build like rooks, in the topmoſt branches of the foreſt, and chuſe their habitation as remote as poſſible from man. But this ſpecies ſoon takes to build in artificial cavities; and, from the temptation of a ready proviſion and numerous ſociety, eaſily ſubmits to the tyranny of man. Still, however, it preſerves its native colour for ſeveral generations, and becomes more variegated only in proportion as it removes from the original ſimplicity of its colouring in the woods.

The dove-houſe pigeon, as is well known, breeds every month; but then it is neceſſary to ſupply it with food when the weather is ſevere, or the fields are covered with ſnow. Upon other occaſions, it may be left to provide for itſelf; and it generally repays the owner for his protection. The pigeon lays two white eggs, which moſt uſually produce young ones of different ſexes. For the laying of each egg, it is neceſſary to have a particular congreſs with the male; and the egg is uſually depoſited in the afternoon. When the eggs are thus laid, the female in the ſpace of fifteen days, not including the three days during which ſhe is employed in laying, continues to hatch, relieved at intervals by

by the male. The turns are uſually regulated with great exactneſs. From three or four o'clock in the evening till nine the next day, the female continues to ſit; ſhe is then relieved by the male, who takes his place from ten till three, while his mate is feeding abroad. In this manner they ſit alternately till the young are excluded. If, during this term, the female delays to return at the expected time, the male follows, and drives her to the neſt; and, ſhould he in his turn be dilatory, ſhe retaliates with equal ſeverity.

The young ones when hatched require no food for the three firſt days, only wanting to be kept warm, which is an employment the female takes entirely upon herſelf. During this period, ſhe never ſtirs out, except for a few minutes to take a little food. From this they are fed for eight or ten days, with corn or grain of different kinds, which the old ones gather in the fields, and keep treaſured up in their crops, from whence they throw it up again into the mouths of their young ones, who very greedily demand it.

As this method of feeding the young from the crop is different in birds of the pigeon-kind from all others, it demands a more detailed explanation. Of all birds, for its ſize, the pigeon has the largeſt crop, which is alſo made in a manner quite peculiar to the kind. In two of

theſe

these that were dissected by a member of the Royal Academy of Sciences, it was found that if the anatomist blew air into the wind-pipe, it distended the crop or gullet to a prodigious size. This was the more extraordinary as there seemed to be no communication whatsoever between these two receptacles, as the conduit by which we breathe, as every one knows, leads to a very different receptacle from that where we put our food. By what apertures the air blown into the lungs of the pigeon makes its way into the crop, is unknown; but nothing is more certain than that these birds have a power of filling the crop with air; and some of them, which are called croppers, distend it in such a manner, that the bird's breast seems bigger than its body. The peculiar mechanism of this part is not well known; but the necessity for it in these animals is pretty obvious. The pigeon, as we all know, lives entirely upon grain and water: these are mixed together in the crop; and in the ordinary way are digested in proportion as the bird lays in its provision. But to feed its young, which are very voracious, it is necessary to lay in a store greater than ordinary, and to give the food a kind of half maceration to suit their tender appetites. The heat of the bird's body, assisted by air, and numerous glands separating a milky fluid, are the most necessary instruments for this operation; but, in propor-

tion as the food macerates, it begins to ſwell alſo; and the crop muſt of conſequence be conſiderably dilated. Still, however, the air which is contained in it gives the bird a power of contracting it at pleaſure; for if it were filled with more ſolid ſubſtances, the bird could have no power to compreſs it. But this is not the caſe, the bird can compreſs its crop at pleaſure; and driving out the air, can thus drive out the food alſo, which is forced up the gullet like a pellet from a pop-gun. The young ones open-mouthed receive this tribute of affection, and are thus fed three times a day. In feeding, the male uſually ſupplies the young female; while the old female ſupplies the young of the oppoſite ſex. The food with which they are ſupplied is more macerated in the beginning; but as they grow older, the parents give it leſs preparation, and at laſt drive them out to ſhift for themſelves. When well fed, however, the old ones do not wait for the total diſmiſſion of their young; but, in the ſame neſt, are to be found young ones almoſt fit for flight, and eggs hatching, at the ſame time.

The fidelity of the turtle-dove is proverbial, and makes the uſual compariſon of ſuch poets as are content to repeat what others have ſaid before them; but the pigeon of the dove-houſe is not ſo faithful; and, having been ſubjected to man, it puts on licentiouſneſs among its other domeſtic

domeſtic habits. Two males are often ſeen quarrelling for the ſame miſtreſs; and when the female admits the addreſſes of a new gallant, her old companion ſeems to bear the contempt with ſome marks of diſpleaſure, abſtains from her company, or if he approaches, it is only to chaſtiſe her. There have been inſtances when two males, being diſpleaſed with their reſpective mates, have thought proper to make an exchange, and have lived in great harmony with their new companions.

So great is the produce of this bird in its domeſtic ſtate, that near fifteen thouſand may in the ſpace of four years be produced from a ſingle pair. But the ſtock-dove ſeldom breeds above twice a year; for, when the winter months come, the whole employment of the fond couple is rather for ſelf-preſervation, than tranſmitting a poſterity. They ſeem, however, to have a ſtronger attachment to their young than thoſe who are found to breed ſo often; whether it be that inſtinct acts more powerfully upon them in their ſtate of nature, or that their affections are leſs divided by the multiplicity of claims.

It is from a ſpecies of theſe, therefore, that thoſe pigeons which are called carriers, and are uſed to convey letters, are produced. Theſe are eaſily diſtinguiſhed from all others by their eyes, which are compaſſed about with a broad circle of naked white ſkin, and by being of a dark blue

blue or blackiſh colour. It is from their attachment to their native place, and particularly where they have brought up their young, that theſe birds are employed in ſeveral countries as the moſt expeditious carriers. They are firſt brought from the place where they were bred, and whither it is intended to ſend them back with information. The letter is tied under the bird's wing, and it is then let looſe to return. The little animal no ſooner finds itſelf at liberty, than its paſſion for its native ſpot directs all its motions. It is ſeen, upon theſe occaſions, flying directly into the clouds to an amazing height; and then, with the greateſt certainty and exactneſs, directing itſelf by ſome ſurprizing inſtinct towards home, which lies ſometimes at many miles diſtance, bringing its meſſage to thoſe to whom it is directed. By what marks they diſcover the place, by what chart they are guided in the right way, is to us utterly unknown; certain it is, that in the ſpace of an hour and a half they perform a journey of forty miles; which is a degree of diſpatch three times greater than the fleeteſt quadrupede can perform. Theſe birds are not brought up at preſent with as much care as formerly, when they were ſent from governors in a beſieged city to generals that were coming to relieve it without; when they were ſent from princes to their ſubjects with the tidings of ſome fortunate event,

or

or from lovers to their miſtreſſes with expreſſions of their paſſion. The only uſe we now ſee made of them, is to be let fly at Tyburn when the cart is drawn away; pretty much as when ſome ancient hero was to be interred, an eagle was let off from the funeral pile, to complete his apotheoſis.

The varieties of the tame pigeon are ſo numerous, that it would be a vain attempt to mention them: ſo much is the figure and the colour of this bird under human controul, that pigeon-fanciers, by coupling a male and female of different ſorts, can breed them, as they expreſs it, to a feather. From hence we have the various names of Croppers, Carriers, Jacobines, Powters, Runts, and Turbits: all birds that at firſt might have accidentally varied from the ſtock-dove; and then, by having theſe varieties ſtill heightened by food, climate and pairing, different ſpecies have been produced. But there are many ſpecies of the wild pigeon which, though bearing a ſtrong affinity to the ſtock-dove, are, nevertheleſs, ſufficiently different from it to deſerve a diſtinct deſcription. The Ring-dove is of this number; a good deal larger than the former, and building its neſt, with a few dry ſticks, in the boughs of trees. This ſeems a bird much fonder of its native freedom than the former; and attempts have been frequently made to render it domeſtic: but they have

have hitherto proved fruitleſs; for, though their eggs have been hatched by the tame pigeon in a dove-houſe, yet, as ſoon as they could fly, they always betook themſelves to the woods where they were firſt produced. In the beginning of winter theſe aſſemble in great flocks in the woods, and leave off cooing; nor do they reſume this note of courtſhip till the beginning of March, when the genial ſeaſon, by ſupplying them with food, renews their deſires.

The Turtle-dove is a ſmaller, but a much ſhyer, bird than any of the former. It may eaſily be diſtinguiſhed from the reſt by the iris of the eye, which is of a fine yellow, and by a beautiful crimſon circle that encompaſſes the eye-lids. The fidelity of theſe birds is noted; and a pair being put in a cage, if one dies, the other will not ſurvive it. The turtle-dove is a bird of paſſage, and few or none remain in our northern climates in winter. They fly in flocks when they come to breed here in ſummer, and delight in open, mountainous, ſandy countries. But they build their neſts in the midſt of woods, and chuſe the moſt retired ſituations for incubation. They feed upon all ſorts of grain, but are fondeſt of millet-ſeed.

To this ſhort liſt might be added a long catalogue of foreign pigeons, of which we know little more than the plumage and the names: indeed, the variety of their plumage is as beauti-

ful

ful as the names by which they are known are harſh and diſſonant. The Ocotzimtzcan, for inſtance, is one of the moſt ſplendid tenants of the Mexican foreſts; but few, I believe, would deſire to learn the name, only to be informed that it is covered with purple, green, and yellow plumage. To deſcribe ſuch birds, the hiſtorian's pen is not half ſuch an uſeful implement as the painter's pencil.

OF

BIRDS

OF THE

SPARROW KIND.

PART IV.

CHAP. I.

Of Birds of the Sparrow Kind in General.

STILL deſcending from the larger to the ſmaller, we come to birds of the ſparrow kind; or that claſs of beautiful little animals that, being leſs than the pigeon, go on diminiſhing till we arrive at the humming-bird, the ſmalleſt of the feathered creation.

The birds which compoſe this claſs chiefly live in the neighbourhood of man, and are his greateſt favourites. The falcon may be more eſteemed, and the turkey more uſeful; but theſe he conſiders as ſervants, not as friends; as animals reclaimed merely to ſupply him with ſome of the conveniencies of life: but theſe little painted ſongſters have his affections, as well from their beauty as their melody; it is this delightful claſs that fill his groves with harmony, and lift his heart to ſympathize with their raptures. All the other claſſes are either mute or ſcreaming; it is this diminutive tribe only that have voices equal to the beauty of their figures; equally adapted to rejoice man, and delight each other.

As they are the favourites of man, ſo they are chiefly ſeen near him. All the great birds dread his vicinity, and keep to the

thickeſt darkneſs of the foreſt, or the brow of the moſt craggy precipice: but theſe ſeldom reſort to the thicker parts of the wood; they keep near its edges, in the neighbourhood of cultivated fields; in the hedge-rows of farm-grounds; and even in the yard, mixing with the poultry.

It muſt be owned, indeed, that their living near man is not a ſociety of affection on their part, as they approach inhabited grounds merely becauſe their chief proviſion is to be found there. In the depth of the deſert, or the gloom of the foreſt, there is no grain to be picked up; none of thoſe tender buds that are ſo grateful to their appetites; inſects, themſelves, that make ſo great a part of their food, are not found there in abundance: their natures being unſuited to the moiſture of the place. As we enter, therefore, deeper into uncultivated woods, the ſilence becomes more profound; every thing carries the look of awful ſtillneſs; there are none of thoſe warblings, none of thoſe murmurs that awaken attention, as near the habitations of men; there is nothing of that confuſed buzz, formed by the united though diſtant voices of quadrupedes and birds; but all is profoundly dead and ſolemn. Now and then, indeed, the traveller may be rouzed from this lethargy of life, by the voice of an heron, or the ſcream of an eagle; but his ſweet little

little friends and warblers have totally forſaken him.

There is ſtill another reaſon for theſe little birds avoiding the depths of the foreſts; which is, that their moſt formidable enemies uſually reſide there. The greater birds, like robbers, chuſe the moſt dreary ſolitudes for their retreats; and, if they do not find, they make a deſert all around them. The ſmall birds fly from their tyranny, and take protection in the vicinity of man, where they know their more unmerciful foes will not venture to purſue them.

All birds, even thoſe of paſſage, ſeem content with a certain diſtrict to provide food and center in. The red-breaſt or the wren ſeldom leaves the field where it has been brought up, or where its young have been excluded; even though hunted it flies along the hedge, and ſeems fond of the place with an imprudent perſeverance. The fact is, all theſe ſmall birds mark out a territory to themſelves, which they will permit none of their own ſpecies to remain in; they guard their dominions with the moſt watchful reſentment; and we ſeldom find two male tenants in the ſame hedge together.

Thus, though fitted by Nature for the moſt wandering life, theſe little animals do not make ſuch diſtant excurſions, during the ſeaſon of

their ſtay, as the ſtag or the leveret. Food ſeems to be the only object that puts them in motion, and when that is provided for them in ſufficient plenty they never wander. But as that is ſeldom permanent through the year, almoſt every bird is then obliged to change its abode. Some are called birds of paſſage, becauſe they are obliged to take long journeys for this purpoſe; but, ſtrictly ſpeaking, almoſt every other kind are birds of paſſage, though their migration may not be to places ſo remote. At ſome particular ſeaſon of the year, all ſmall birds migrate either from one county to another, or from the more inland provinces towards the ſhore.

There are ſeveral perſons who get a livelihood by watching the ſeaſons when our ſmall birds begin to migrate from one county to another, and by taking them with nets in their paſſage. The birds are found to fly, as the bird-catchers term it, chiefly during the month of October, and part of September and November. There is alſo another flight in March, which is much leſs conſiderable than that in autumn. Nor is it leſs remarkable, that ſeveral of theſe ſpecies of flight-birds make their appearance in regular ſucceſſion. The pippit, for inſtance, begins its flight every year about Michaelmas, when they are caught in greateſt number. To this the wood-lark ſucceeds, and continues its flight

flight till towards the middle of October; other birds follow, but are not so punctually periodical; the green-finch does not begin till the frost obliges it to seek for a change. These birds, during those months, fly from day-break till twelve at noon; and there is afterwards a small flight from two till night. Such are the seasons of the migration of the birds, which have been usually considered as stationary, and on these occasions they are caught in great abundance, as they are on their journey. But the same arts used to allure them upon other occasions would be utterly fruitless, as they avoid the nets with the most prudent circumspection. The autumnal flight probably consists of the parents conducting their new-fledged young to those places where there is sufficient provision, and a proper temperament of the air during the winter season; and their return in spring is obviously from an attachment to the place which was found so convenient before for the purposes of nestling and incubation.

Autumn is the principal season when the bird-catcher employs his art to catch these wanderers. His nets are a most ingenious piece of mechanism, being generally twelve yards and an half long, and two yards and an half wide, and so contrived as from a flat position to rise on each side, and clap over the birds that are decoyed to come between them. The birds in

their paſſage are always obſerved to fly againſt the wind; hence there is a great contention among the bird-catchers which ſhall gain the wind; for example, if it is weſterly, the bird-catcher who lays his nets moſt to the eaſt, is ſure of the moſt plentiful ſport, if his call-birds are good. For this purpoſe, he generally carries five or ſix linnets, two gold-finches, two green-finches, one wood-lark, one red-poll, and perhaps a bull-finch, a yellow-hammer, a tit-lark, and an aberdavine: theſe are placed at ſmall diſtances from the nets, in little cages. He has beſides what he calls his flur-birds, which are placed upon a moveable perch, which the bird-catcher can raiſe at pleaſure by means of a ſtring; and theſe he always liſts gently up and down as the wild bird approaches. But this is not enough to allure the wild bird down; it muſt be called by one of the call-birds in the cages; and theſe, by being made to moult prematurely in a warm cage, call louder and better than thoſe that are wild and at freedom. There even appears a malicious joy in theſe call-birds to bring the wild ones into the ſame ſtate of captivity, while at the ſame time their call is louder and their plumage brighter than in a ſtate of nature. Nor is their ſight or hearing leſs exquiſite, far exceeding that of the bird-catcher; for the inſtant the wild birds are perceived, notice is given by one to the reſt of the call-birds,

call-birds, who all unite in the ſame tumultuous exſtacy of pleaſure. The call-birds do not ſing upon theſe occaſions as a bird does in a chamber, but incite the wild ones by ſhort jerks, which, when the birds are good, may be heard at a great diſtance. The allurement of this call is ſo great, that the wild bird hearing it is ſtopped in its moſt rapid flight; and, if not already acquainted with the nets, lights boldly within twenty yards perhaps of the bird-catcher, and on a ſpot which it would otherwiſe have quite diſregarded. This is the opportunity wiſhed for, and the bird-catcher pulling a ſtring, the nets on each ſide riſe in an inſtant, and clap directly down on the poor little unſuſpecting viſitant. Nay, it frequently happens that if half a flock only are caught, the remaining half will immediately afterwards light between the nets, and ſhare the fate of their companions. Should only one bird eſcape, this unhappy ſurvivor will alſo venture into danger till it is caught; ſuch a faſcinating power have the call-birds.

Indeed, it is not eaſy to account for the nature of this call, whether it be a challenge to combat, an invitation to food, or a prelude to courtſhip. As the call-birds are all males, and as the wild birds that attend to their voice are moſt frequently males alſo, it does not ſeem that love can have any influence in their aſſiduity. Perhaps the wild females, in theſe flights, attend to

and obey the call below, and their male companions of the flight come down to bear them company. If this be the caſe, and that the females have unfaithfully led their mates into the nets, they are the firſt that are puniſhed for their infidelity; the males are only made captives for ſinging; while the females are indiſcriminately killed, and ſold to be ſerved up to the tables of the delicate.

Whatever be the motives that thus arreſt a flock of birds in their flight, whether they be of gallantry or of war, it is certain that the ſmall birds are equally remarkable for both. It is, perhaps, the genial deſire that inſpires the courage of moſt animals; and that being greateſt in the males, gives them a greater degree of valour than the females. Small birds, being extremely amorous, are remarkable brave. However contemptible theſe little warriors are to larger creatures, they are often but too formidable to each other; and ſometimes fight till one of them yields up his life with the victory. But their contentions are ſometimes of a gentler nature. Two male birds ſhall ſtrive in ſong, till, after a long ſtruggle, the loudeſt ſhall entirely ſilence the other. During theſe contentions, the female ſits an attentive ſilent auditor, and often rewards the loudeſt ſongſter with her company during the ſeaſon.

Singing among birds is almoſt univerſally the

the prerogative of the male. With them it is the reverſe of what occurs in the human kind. Among the feathered tribe, the heavieſt cares of life fall to the lot of the female. Hers is the fatigue of incubation, and to her devolves the principal fatigue of nurſing the helpleſs brood. To alleviate theſe fatigues, and to ſupport her under them, Nature has given the ſong to the male. This ſerves as a note of blandiſhment at firſt to attract her affections; it ſerves as a note to delight her during the time of her incubation; but it ſerves ſtill farther as a note of ſecurity, to aſſure her that no danger threatens to moleſt her. The male, while his mate is hatching, ſits upon ſome neighbouring tree, continuing at once to watch and to ſing. While his voice is heard, the female reſts in confident ſecurity; and, as the poet expreſſes it, appears *moſt bleſſed when moſt unſeen:* But if any appearance of danger offers to intrude, the male, that a moment before was ſo loud and ſportive, ſtops all of a ſudden; and this is a moſt certain ſignal to his mate to provide for her own ſecurity.

The neſt of little birds ſeems to be of a more delicate contrivance than that of the larger kinds. As the volume of their bodies is ſmaller, the materials of which their neſts are compoſed are generally warmer. It is eaſy to conceive that ſmall things keep heat a ſhorter time than thoſe

that are large. The eggs, therefore, of ſmall birds require a place of more conſtant warmth than thoſe of great ones, as being liable to cool more quickly; and accordingly their neſts are built warmer and deeper, lined on the inſide with ſofter ſubſtances, and guarded above with a better covering. But it ſometimes happens that the little architects are diſturbed in their operations, and then they are obliged to make a neſt, not ſuch as they wiſh, but ſuch as they can. The bird, whoſe neſt has been robbed ſeveral times, builds up her laſt in a very ſlovenly manner, conſcious that, from the near approach of winter, ſhe muſt not take time to give her habitation every poſſible advantage it is capable of receiving. When the neſt is finiſhed, nothing can exceed the cunning which the male and female employ to conceal it. If it is built in buſhes, the pliant branches are ſo diſpoſed as to hide it entirely from the view; if it be built among moſs, nothing outwardly appears to ſhew that there is an habitation within. It is always built near thoſe places where food is found in greateſt abundance; and they take care never to go in or out while there is any one in ſight. The greater birds continue from their neſt for ſome time, as their eggs take no damage in their abſence; but the little birds are aſſiduous while they ſit, and the neſt is always occupied

pied by the male when the female is obliged to ſeek for ſuſtenance.

The firſt food of all birds of the ſparrow kind is worms and inſects. Even the ſparrow and the gold-finch, that when adult feed only upon grain, have both been fed upon inſects while in the neſt. The young ones, for ſome time after their excluſion from the ſhell, require no food; but the parent ſoon finds by their chirping and gaping that they begin to feel the approaches of hunger, and flies to provide them a plentiful ſupply. In her abſence, they continue to lie cloſe together, and cheriſh each other by their mutual warmth. During this interval alſo they preſerve a perfect ſilence, uttering not the ſlighteſt note till the parent returns. Her arrival is always announced by a chirrup, which they perfectly underſtand, and which they anſwer all together, each petitioning for its portion. The parent diſtributes a ſupply to each by turns, cautiouſly avoiding to gorge them, but to give them often though little at a time. The wren will in this manner feed ſeventeen or eighteen young ones, without paſſing over one of them.

Such is the manner in which theſe birds bring forth and hatch their young; but it yet remains to uſher them from the neſt into life, and this they very aſſiduouſly perform. When they are fully fledged, and fitted for ſhort flights,

the old ones, if the weather be fair, lead them a few yards from the neſt, and then compel them to return. For two or three ſucceeding days they are led out in the ſame manner, but each day to ſeek more diſtant adventures. When it is perceived that they can fly, and ſhift for themſelves, then the parents forſake them for ever, and pay them no more attention than they do to other birds in the ſame flock. Indeed, it would ſeem among theſe little animals that, from the moment their young are ſet out, all future connexion ceaſes between the male and female; they go ſeparate ways, each to provide for itſelf, during the rigours of winter; and, at the approach of ſpring, each ſeeks for a new aſſociate.

In general, birds, when they come to pair in ſpring, aſſociate with thoſe of their own age and place of abode. Their ſtrength or courage is generally in proportion to their age; the oldeſt females firſt feel the acceſſes of deſire, and the oldeſt males are the boldeſt to drive off all younger pretenders. Thoſe next in courage and deſire, become pretenders, till they are almoſt all provided in turn. The youngeſt come laſt; as, in fact, they are the lateſt in their inclinations. But ſtill there are ſeveral, both males and females, that remain unprovided for; either not happening to meet with each other, or at leaſt not during the genial interval. Whe-

ther these mix with small birds of a different species, is a doubt which naturalists have not been able thoroughly to resolve. Addison, in some beautiful Latin lines, inserted in the Spectator, is entirely of opinion that birds observe a strict chastity of manners, and never admit the caresses of a different tribe.

Chaste are their instincts, faithful is their fire,
No foreign beauty tempts to false desire;
The snow-white vesture, and the glittering crown,
The simple plumage, or the glossy down,
Prompt not their love. The patriot bird pursues
His well-acquainted tints, and kindred hues.
Hence through their tribes no mix'd polluted flame,
No monster breed to mark the groves with shame:
But the chaste blackbird, to its partner true,
Thinks black alone is beauty's favourite hue:
The nightingale, with mutual passion blest,
Sings to its mate, and nightly charms the nest:
While the dark owl, to court his partner flies,
And owns his offspring in their yellow eyes.

But whatever may be the poet's opinion, the probability is against this fidelity among the smaller tenants of the grove. The great birds are much more true to their species than these; and, of consequence, the varieties among them are more few. Of the ostrich, the cassowary, and the eagle, there are but few species; and no arts that man can use, could probably induce them to mix with each other.

But it is otherwise with the small birds we

are

are deſcribing; it requires very little trouble to make a ſpecies between a gold-finch and a canary-bird, between a linnet and a lark. They breed frequently together; and produce a race, not, like the mules among quadrupedes, incapable of breeding again; for this motley mixture are as fruitful as their parents. What is ſo eaſily done by art, very probably often happens in a ſtate of nature; and when the male cannot find a mate of his own ſpecies, he flies to one of another, that, like him, has been left out in pairing. This ſome hiſtorians think may have given riſe to the great variety of ſmall birds that are ſeen among us; ſome uncommon mixture might firſt have formed a new ſpecies, and this might have been continued down, by birds of this ſpecies chuſing to breed together.

Whether the great variety of our ſmall birds may have ariſen from this ſource, cannot now be aſcertained; but certain it is, that they reſemble each other very ſtrongly, not only in their form and plumage, but alſo in their appetites and manner of living. The goldfinch, the linnet, and the yellow-hammer, though obviouſly of different ſpecies, yet lead a very ſimilar life; being equally an active, lively, ſalacious tribe, that ſubſiſt by petty thefts upon the labours of mankind, and repay them with a ſong. Their neſts bear a ſimilitude; and they are all about

the ſame time in hatching their young, which is uſually fifteen days. Were I therefore to deſcribe the manners of theſe with the ſame minuteneſs that I have done the greater birds, I ſhould only preſent the reader with a repetition of the ſame accounts; animated neither by novelty nor information. Inſtead, therefore, of ſpecifying each ſort, I will throw them into groupes; uniting thoſe together that practiſe the ſame manners, or that are remarkable for ſimilar qualifications.

Willughby has divided all the ſmaller birds into thoſe that have ſlender bills, and thoſe that have ſhort and thick bills. Thoſe with ſlender bills chiefly live upon inſects; thoſe with ſhort, ſtrong bills, live moſtly upon fruits and grain. Among ſlender-billed birds, he enumerates the thruſh, the blackbird, the fieldfare, the ſtarling, the lark, the titmouſe, the water-wagtail, the nightingale, the red-ſtart, the robin red-breaſt, the beccaſigo, the ſtone-chatter, the whinchat, the goldfinch, the white-throat, the hedge-ſparrow, the pettichaps, the golden-crowned wren, the wren, the humming-bird, and ſeveral other ſmall birds of the ſparrow kind, unknown in this part of the world.

All theſe, as was ſaid, live for the moſt part upon inſects; and are conſequently of particular benefit to man. By theſe are his grounds cleared of the pernicious ſwarms of vermin that devour the budding leaves and flowers; and

and that even attack the root itſelf, before ever the vegetable can come to maturity. Theſe ſeek for and deſtroy the eggs of inſects that would otherwiſe propagate in numbers beyond the arts of man to extirpate: they know better than man where to ſeek for them; and thus at once ſatisfy their own appetites, and render him the moſt eſſential ſervices.

But this is not the only merit of this tribe: in it we have the ſweeteſt ſongſters of the grove; their notes are ſofter, and their manner more muſically ſoothing than thoſe of hard-billed birds. The foremoſt in muſical fame are, the nightingale, the thruſh, the blackbird, the lark, the red-breaſt, the black-cap, and the wren.

Birds of the ſparrow kind, with thick and ſhort bills, are the groſsbeak, the greenfinch, the bull-finch, the croſsbill, the houſe-ſparrow, the chaf-finch, the brambling, the goldfinch, the linnet, the ſiſkin, the bunting, the yellow-hammer, the ortolan, the wheat-ear, and ſeveral other foreign birds, of which we know rather the names than the hiſtory. Theſe chiefly feed upon fruits, grain, and corn. They are often troubleſome to man, as they are a numerous tribe: the harveſt often ſuffers from their depredations; and while they are driven off from one end of the field, they fly round, and come in at the other. But theſe alſo have their uſes: they are frequently the diſtributors of ſeeds into different diſtricts: thoſe

thoſe grains which they ſwallow are ſometimes not wholly digeſted; and theſe, laid upon a ſoil congenial to them, embelliſh the face of nature with that agreeable variety which art but vainly attempts to imitate. The miſletoe plant, which we often ſee growing on the tops of elm and other trees, has been thought to be propagated in this manner; yet, as it is often ſeen growing on the under ſide of the branch, and ſometimes on a perpendicular ſhoot, it ſeems extraordinary how a ſeed could be depoſited in that ſituation. However this be, there are many plants propagated from the depoſitions of birds; and ſome ſeeds are thought to thrive the better, for firſt having undergone a kind of maceration in the ſtomach of the little animal, before it is voided on the ground.

There are ſome agreeable ſongſters in this tribe alſo; and thoſe who like a loud piercing pipe, endued with great variety and perſeverance, will be pleaſed moſt with their ſinging. The ſongſters of this claſs are the canary-bird, the linnet, the chaffinch, the goldfinch, the greenfinch, the bullfinch, the brambling, the ſiſkin, and the yellow-hammer. The note of theſe is not ſo generally pleaſing as that of the ſoft-billed bird, but it uſually holds longer; and, in a cage, theſe birds are more eaſily fed, and hardy.

This claſs of ſmall birds, like all the greater,

has

has its wanderers, that leave us for a ſeaſon, and then return, to propagate, to ſing, or to embelliſh the landſcape here. Some of this ſmaller kind, indeed, are called birds of paſſage, that do not properly come under the denomination; for though they diſappear in one place, they never leave the kingdom, but are ſeen ſomewhere elſe. But there are many among them, that take longer flights, and go to a region colder or warmer, as it ſuits their conſtitutions. The field-fare and the red-wing breed paſs their ſummers in Norway, and other cold countries, and are tempted hither to our mild winters, and to thoſe various berries which then abound with us, and make their principal food. The hawfinch and the croſsbill are uncertain viſitants, and have no ſtated times of migration. Swallows of every ſpecies diſappear at the approach of winter. The nightingale, the black-cap, the fly-catcher, the willow-wren, the wheat-ear, the whin-chat, and the ſtone-chatter, leave us long before the approach of winter; while the ſiſkin and the linnet only forſake us when our winters are more than uſually ſevere. All the reſt of the ſmaller tribe never quit this country; but ſupport the ſevereſt rigours of the climate.

Yet it muſt not be ſuppoſed that the manners of our little birds prevail in all other countries; and that ſuch kinds as are ſtationary with us, never wander in other parts of Europe: on the contrary,

contrary, it happens that many of thoſe kinds which are birds of paſſage in England, are ſeen, in other places, never to depart, but to make one country their fixed reſidence the whole year round. It is alſo frequent, that ſome birds, which with us are faithful reſidents, in other kingdoms put on the nature of birds of paſſage, and diſappear for a ſeaſon.

The ſwallow, that with us is particularly remarked for being a bird of paſſage, in Upper Egypt, and in the iſland of Java, breeds and continues the whole year, without ever diſappearing. Larks, that remain with us the year throughout, are birds of paſſage in Sweden; and forſake that climate in winter, to return again with the returning ſpring. The chaffinch, that with us is ſtationary, appears during the winter in Carolina and Virginia; but diſappears totally in ſummer, to breed in the more northern regions. In Sweden, alſo, theſe little birds are ſeen returning, at the approach of ſpring, from the warmer climates, to propagate; which being accompliſhed by the latter end of autumn, the males and females ſeparate; the males to continue among their native ſnows, the females to ſeek a warmer and gentler winter. On this occaſion, they are ſeen in flocks, that darken all the air, without a ſingle male among them, making their way into the more ſouthern regions of Denmark, Germany, and Holland. In this

this amazon-like retreat, thouſands fall by the way; ſome by fatigue, ſome by want; but the greateſt number by the nets of the fowler; the taking them being one of the chief amuſements among the gentry where they paſs. In ſhort, the change of country with all this little tribe, is rather a pilgrimage than a journey; a migration rather of neceſſity than of choice.

Having thus given a general idea of the birds of this claſs, it will be proper to give ſome account of the moſt remarkable among them.

CHAP. II.

Of the Thruſh, and its Affinities.

WITH the Thruſh we may rank the red-wing, the field-fare, the black-bird, the ring-ouzel, and the water-ouzel.

Theſe are the largeſt of the ſparrow-kind, and may be diſtinguiſhed from all others of this claſs, as well by their ſize, which is well known, as by their bills, which are a little bending at the point; a ſmall notch near the end of the upper chap, and the outmoſt toe adhering as far as the firſt joint of the middle toe. To this tribe may be alſo added the ſtare or ſtarling, which, though with a flat bill, too much reſembles theſe birds to be placed any where elſe.

The

The miſſel-thruſh is diſtinguiſhed from all of the kind by its ſuperior ſize, being much larger than any of them. It differs ſcarcely in any other reſpect from the throſtle, except that the ſpots on the breaſt are larger. It builds its neſt in buſhes, or on the ſide of ſome tree, as all of this kind are found to do, and lays four or five eggs in a ſeaſon. Its ſong is very fine, which it begins in ſpring, ſitting on the ſummit of a high tree. It is the largeſt bird of all the feathered tribe that has muſic in its voice; the note of all greater birds being either ſcreaming, chattering, or croaking. It feeds on inſects, holly and miſletoe-berries; and ſometimes ſends forth a very diſagreeable ſcream when frighted or diſturbed.

The black-bird, which in cold countries, and particularly upon the Alps, is ſometimes ſeen all over white, is a beautiful and canorous bird, whiſtling all the ſpring and ſummer time with a note at a diſtance the moſt pleaſing of all the grove. It is the deepeſt toned warbler of the woods; but it is rather unpleaſant in a cage, being loud and deafening. It lays four or five blueiſh eggs, in a neſt uſually built at the ſtump of ſome old hawthorn, well plaiſtered on the inſide with clay, ſtraw, and hair.

Pleaſing, however, as this bird may be, the blue-bird, deſcribed by Bellonius, is in every reſpect far ſuperior. This beautiful animal entirely

tirely reſembles a black-bird in all but its blue colour. It lives in the higheſt parts of the Alps, and even there chuſes the moſt craggy rocks and the moſt frightful precipices for its reſidence. As it is rarely caught, it is in high eſtimation even in the countries where it breeds, but ſtill more valuable when carried from home. It not only whiſtles in the moſt delightful manner, but ſpeaks with an articulate diſtinct voice. It is ſo docile, and obſerves all things with ſuch diligence, that, though waked at midnight by any of the family, it will ſpeak and whiſtle at the word of command. Its colour, about the beginning of winter, from blue becomes black, which changes to its original hue on the firſt approaches of ſpring. It makes its neſt in deep holes, in very high and inacceſſible ſolitudes, and removes it not only from the acceſſes of man, but alſo hides it with ſurpriſing cunning from the ſhammoy, and other wild beaſts that might annoy its young.

The manner of taking this beautiful bird is ſaid to be this. The fowlers, either by chance or by lying in wait, having found out the place where it builds, take with them a ſtrong ſtilt or ſtake, ſuch as the climbers of rocks make uſe of to aſſiſt them in their aſcent. With the aſſiſtance of this, they mount where an indifferent ſpectator would think it impoſſible to aſcend, covering their heads at the ſame time

to

to ward off any danger of the falling of pebbles or ſtones from above. At length, with extreme toil and danger, having arrived at the neſt, they draw it up from the hole in which it is uſually buried, and cheriſh the young with an aſſiduity equal to the pains they took to obtain them. It produces for the moſt part five young, and never more; it ſeldom deſcends into the plain country; flies ſwifter than a black-bird, and uſes the ſame food.

The field-fare and the red-wing make but a ſhort ſtay in this country. With us they are inſipid tuneleſs birds, flying in flocks, and exceſſively watchful to preſerve the general ſafety. All their ſeaſon of muſic and pleaſure is employed in the more northern climates, where they ſing moſt delightfully, perched among the foreſts of maples, with which thoſe countries abound. They build their neſts in hedges; and lay ſix blueiſh green eggs, ſpotted with black.

The ſtare, diſtinguiſhable from the reſt of this tribe by the gloſſy green of its feathers, in ſome lights, and the purple in others, breeds in hollow trees, eaves of houſes, towers, ruins, cliffs, and often in high rocks over the ſea. It lays four or five eggs of a pale greeniſh aſh-colour, and makes its neſt of ſtraw, ſmall fibres of roots, and ſuch like. Its voice is rougher than the reſt of this kind; but what it wants in the

the melody of its note, it compenſates by the facility with which it is taught to ſpeak. In winter theſe birds aſſemble in vaſt flocks, and feed upon worms and inſects. At the approach of ſpring, they aſſemble in fields, as if in conſultation together, and for three or four days ſeem to take no nouriſhment: the greater part leave the country; the reſt breed here and bring up their young.

To this tribe might be added above an hundred other birds of nearly the thruſh ſize, and living like them upon fruit and berries. Words could not afford variety enough to deſcribe all the beautiful tints that adorn the foreign birds of the thruſh kind. The brilliant green of the emerald, the flaming red of the ruby, the purple of the amethyſt, or the bright blue of the ſaphire, could not by the moſt artful combination ſhew any thing ſo truly lively or delightful to the ſight as the feathers of the chilcoqui or the tautotol. Paſſing, therefore, over theſe beautiful, but little known, birds, I will only mention the American mock-bird, the favourite ſongſter of a region where the birds excel rather in the beauty of their plumage than the ſweetneſs of their notes.

This valuable bird does not ſeem to vie with the feathered inhabitants of that country in the beauty of its plumage, content with qualifications that endear it to mankind much more. It

is

is but a plain bird to the eye, about the ſize of a thruſh, of a white and grey colour, and a reddiſh bill. It is poſſeſſed not only of its own natural notes, which are muſical and ſolemn, but it can aſſume the tone of every other animal in the wood, from the wolf to the raven. It ſeems even to ſport itſelf in leading them aſtray. It will at one time allure the leſſer birds with the call of their males, and then terrify them when they have come near with the ſcreams of the eagle. There is no bird in the foreſt but it can mimick; and there is none that it has not at times deceived by its call. But, not like ſuch as we uſually ſee famed for mimicking with us, and who have no particular merit of their own, the mock-bird is ever ſureſt to pleaſe when it is moſt itſelf. At thoſe times it uſually frequents the houſes of the American planters; and, ſitting all night on the chimney-top, pours forth the ſweeteſt and the moſt various notes of any bird whatever. It would ſeem, if accounts be true, that the deficiency of moſt other ſong-birds in that country is made up by this bird alone. They often build their neſts in the fruit-trees about houſes, feed upon berries and other fruits, and are eaſily rendered domeſtic.

CHAP. III.

Of the Nightingale, and other ſoft-billed Song-Birds.

THE Nightingale is not only famous among the moderns for its ſinging, but almoſt every one of the ancients who undertook to deſcribe beautiful nature, has contributed to raiſe its reputation. "The Nightingale," ſays Pliny, "that, for fifteen days and nights hid in "the thickeſt ſhades, continues her note with-"out intermiſſion, deſerves our attention and "wonder. How ſurpriſing, that ſo great a voice "can reſide in ſo ſmall a body! ſuch perſever-"ance in ſo minute an animal! With what a "muſical propriety are the ſounds it produces "modulated! The note at one time drawn out "with a long breath, now ſtealing off into a "different cadence, now interrupted by a break, "then changing into a new note by an un-"expected tranſition, now ſeeming to renew "the ſame ſtrain, then deceiving expectation! "She ſometimes ſeems to murmur within her-"ſelf; full, deep, ſharp, ſwift, drawling, trem-"bling; now at the top, the middle, and the "bottom of the ſcale! In ſhort, in that little "bill ſeems to reſide all the melody which man "has vainly laboured to bring from a variety of "muſical

" muſical inſtruments. Some even ſeem to be " poſſeſſed of a different ſong from the reſt, and " contend with each other with great ardour. " The bird overcome is then ſeen only to diſ- " continue its ſong with its life."

This moſt famous of the feathered tribe viſits England in the beginning of April, and leaves us in Auguſt. It is found but in ſome of the ſouthern parts of the country, being totally unknown in Scotland, Ireland, or North Wales. They frequent thick hedges and low coppices, and generally keep in the middle of the buſh, ſo that they are rarely ſeen. They begin their ſong in the evening, and generally continue it for the whole night. For weeks together, if undiſturbed, they ſit upon the ſame tree; and Shakeſpeare rightly deſcribes the nightingale ſitting nightly in the ſame place, which I have frequently obſerved ſhe ſeldom departs from.

From Pliny's deſcription, we ſhould be led to believe this bird poſſeſſed of a perſevering ſtrain; but, though it is in fact ſo with the nightingale in Italy, yet in our hedges in England the little ſongſtreſs is by no means ſo liberal of her muſic. Her note is ſoft, various, and interrupted; ſhe ſeldom holds it without a pauſe above the time that one can count twenty. The nightingale's pauſing ſong would be the proper epithet for this bird's muſic with us, which is more pleaſing than the warbling of any other bird, be-

cauſe it is heard at a time when all the reſt are ſilent.

In the beginning of May, the nightingale prepares to make its neſt, which is formed of the leaves of trees, ſtraw, and moſs. The neſt being very eagerly ſought after, is as cunningly ſecreted; ſo that but very few of them are found by the boys when they go upon theſe purſuits. It is built at the bottom of hedges, where the buſhes are thickeſt and beſt covered. While the female continues ſitting, the male at a good diſtance, but always within hearing, chears the patient hour with his voice, and, by the ſhort interruption of his ſong, often gives her warning of approaching danger. She lays four or five eggs; of which but a part, in our cold climate, come to maturity.

The delicacy, or rather the fame, of this bird's muſic, has induced many to abridge its liberty, to be ſecured of its ſong. Indeed, the greateſt part of what has been written concerning it in our country, conſiſts in directions how to manage it for domeſtic ſinging; while the hiſtory of the bird is confined to dry receipts for fitting it for the cage. Its ſong, however, in captivity is not ſo very alluring; and the tyranny of taking it from thoſe hedges where only it is moſt pleaſing, ſtill more depreciates its impriſoned efforts. Geſner aſſures us, that it is not only the moſt agreeable ſongſter in a cage, but

but that it is poſſeſſed of a moſt admirable faculty of talking. He tells the following ſtory in proof of his aſſertion, which he ſays was communicated to him by a friend. "Whilſt I "was at Ratiſbone," ſays his correſpondent, "I put up at an inn, the ſign of the Golden "Crown, where my hoſt had three nightingales. "What I am going to repeat is wonderful, al- "moſt incredible, and yet is true. The night- "ingales were placed ſeparately, ſo that each "was ſhut up by itſelf in a dark cage. It hap- "pened at that time, being the ſpring of the "year, when thoſe birds are wont to ſing inde- "fatigably, that I was ſo afflicted with the "ſtone, that I could ſleep but very little all "night. It was uſual then about midnight, "when there was no noiſe in the houſe, but all "ſtill, to hear the two nightingales jangling, "and talking with each other, and plainly imi- "tating men's diſcourſes. For my part I was "almoſt aſtoniſhed with wonder; for at this "time, when all was quiet elſe, they held con- "ference together, and repeated whatever they "had heard among the gueſts by day. Thoſe "two of them that were moſt notable, and "maſters of this art, were ſcarce ten foot diſtant "from one another. The third hung more re- "mote, ſo that I could not ſo well hear it as I "lay abed. But it is wonderful to tell how thoſe "two provoked each other; and by anſwering,

" invited and drew one another to ſpeak. Yet
" did they not confound their words, or talk
" both together, but rather utter them alternately
" and of courſe. Beſides the daily diſcourſe of
" the gueſts, they chanted out two ſtories,
" which generally held them from midnight till
" morning; and that with ſuch modulations
" and inflections, that no man could have taken
" to come from ſuch little creatures. When I
" aſked the hoſt if they had been taught, or
" whether he obſerved their talking in the night,
" he anſwered, no: the ſame ſaid the whole fa-
" mily. But I, who could not ſleep for nights
" together, was perfectly ſenſible of their diſ-
" courſe. One of their ſtories was concerning
" the tapſter and his wife, who refuſed to follow
" him to the wars as he deſired her; for the
" huſband endeavoured to perſuade his wife, as
" far as I underſtood by the birds, that he would
" leave his ſervice in that inn, and go to the
" wars in hopes of plunder. But ſhe refuſed to
" follow him, reſolving to ſtay either at Ratiſ-
" bone, or go to Nuremberg. There was a
" long and earneſt contention between them;
" and all this dialogue the birds repeated. They
" even repeated the unſeemly words which were
" caſt out between them, and which ought ra-
" ther to have been ſuppreſſed and kept a ſecret.
" But the birds, not knowing the difference be-
" tween modeſt, immodeſt, honeſt, and filthy
" words,

" words, did out with them. The other ſtory " was concerning the war which the emperor " was then threatening againſt the proteſtants; " which the birds probably heard from ſome of " the generals that had conferences in the houſe. " Theſe things did they repeat in the night " after twelve o'clock, when there was a deep " ſilence. But in the day-time, for the moſt " part, they were ſilent, and ſeemed to do no- " thing but meditate and revolve with them- " ſelves upon what the gueſts conferred together " as they ſat at table, or in their walks. I verily " had never believed our Pliny writing ſo many " wonderful things concerning theſe little crea- " tures, had I not myſelf ſeen with my eyes, and " heard them with my ears uttering ſuch things " as I have related. Neither yet can I of a " ſudden write all, or call to remembrance every " particular that I have heard."

Such is the ſagacity aſcribed to the nightingale; it is but to have high reputation for any one quality, and the world is ready enough to give us fame for others to which we have very ſmall pretenſions. But there is a little bird, rather celebrated for its affection to mankind than its ſinging, which however, in our climate, has the ſweeteſt note of all others. The reader already perceives that I mean the Red-breaſt, the well-known friend of man, that is found in every hedge, and makes it vocal. The note of

other birds is louder, and their inflections more capricious; but this bird's voice is ſoft, tender, and well ſupported; and the more to be valued as we enjoy it the greateſt part of the winter. If the nightingale's ſong has been compared to the fiddle, the red-breaſt's voice has all the delicacy of the flute.

The red-breaſt, during the ſpring, haunts the wood, the grove, and the garden; it retires to the thickeſt and ſhadieſt hedge-rows to breed in. But in winter it ſeems to become more domeſtic, and often to claim protection from man. Moſt of the ſoft-billed birds, the nightingale, the ſwallow, and the tit-mouſe, leave us in the winter, when their inſect food is no longer offered in plenty; but the red-breaſt continues with us the year round, and endeavours to ſupport the famine of winter by chirping round the warm habitations of mankind, by coming into thoſe ſhelters where the rigour of the ſeaſon is artificially expelled, and where inſects themſelves are found in greater numbers, attracted by the ſame cauſe.

This bird breeds differently in different places: in ſome countries its neſt is uſually found in the crevice of ſome moſſy bank, or at the foot of an hawthorn in hedge-rows; in others, it chuſes the thickeſt coverts, and hides its neſt with oak leaves. The eggs are from four to five, of a dull white, with reddiſh ſtreaks.

The

The Lark, whether the ſky-lark, the wood, or the tit-lark, being all diſtinguiſhable from other little birds by the length of their heel, are louder in their ſong than either of the former, but not ſo pleaſing. Indeed, the muſic of every bird in captivity produces no very pleaſing ſenſations; it is but the mirth of a little animal inſenſible of its unfortunate ſituation; it is the landſcape, the grove, the golden break of day, the conteſt upon the hawthorn, the fluttering from branch to branch, the ſoaring in the air, and the anſwering of its young, that gives the bird's ſong its true reliſh. Theſe united, improve each other, and raiſe the mind to a ſtate of the higheſt, yet moſt harmleſs exultation. Nothing can in this ſituation of mind be more pleaſing than to ſee the lark warbling upon the wing; raiſing its note as it ſoars until it ſeems loſt in the immenſe heights above us, the note continuing, the bird itſelf unſeen; to ſee it then deſcending with a ſwell as it comes from the clouds, yet ſinking by degrees as it approaches its neſt, the ſpot where all its affections are centered; the ſpot that has prompted all this joy.

The lark builds its neſt upon the ground, beneath ſome turf that ſerves to hide and ſhelter it. The female lays four or five eggs, of a duſky hue in colour, ſomewhat like thoſe of a plover. It is while ſhe is ſitting that the male thus uſually entertains her with his ſinging;

and while he is riſen to an imperceptible height, yet he ſtill has his loved partner in his eye, nor once loſes ſight of the neſt either while he aſcends or is deſcending. This harmony continues ſeveral months, beginning early in the ſpring on pairing. In winter they aſſemble in flocks, when their ſong forſakes them, and the bird-catchers deſtroy them in great numbers for the tables of the luxurious.

The Black-cap and the Wren, though ſo very diminutive, are yet prized by ſome for their ſinging. The former is called by ſome the mock nightingale; and the latter is admired for the loudneſs of its note, compared to the little body from whence it iſſues. It muſt be confeſſed that this diſproportion between the voice of a bird and its ſize, in ſome meaſure demands our wonder. Quadrupedes in this reſpect may be conſidered as mutes to them. The peacock is louder than the lion, and the rabbit is not ſo loud as the wren. But it muſt be conſidered that birds are very differently formed; their lungs in ſome meaſure are extended through their whole body, while in quadrupedes they lie only in the breaſt. In birds there are a variety of cells which take in the air, and thus pour forth their contents at the little animal's command. The black-cap and the wren, therefore, are as reſpectable for their voices as they might be deemed inconſiderable for their ſize.

All

All these soft-billed birds, thus prized for their singing, are rendered domestic, and brought up with assiduity by such as are fond of their voices in a cage. The same method of treatment serves for all, as their food and their habits are nearly the same. The manner of taking and treating them, particularly the nightingale, is this. A nightingale's nest may be found by observing the place where the male sings, and then by sticking two or three meal-worms (a kind of maggot found in flour) on some neighbouring thorn, which when he sees he will infallibly bear away to his young. By listening, he then may be heard with the female chirping to the young ones while they are feeding. When the nest is found, if the young ones are not fledged enough to be taken, they must not be touched with the hands, for then the old ones will perceive it, and entice them away. They should not be taken till they are almost as full of feathers as the old ones; and, though they refuse their meat, yet, by opening their bills, you may give them two or three small bits at a time, which will make them soon grow tame, when they will feed themselves. They should be put nest and all into a little basket, which should be covered up warm; and they should be fed every two hours. Their food should be sheep's hearts, or other raw flesh meat, chopped very fine, and all the strings, skins, and fat,

taken away. But it ſhould always be mixed with hard hen's eggs, upon which they will feed and thrive abundantly.

They ſhould then be put in cages like the nightingale's back cage, with a little ſtraw or dry moſs at the bottom; but when they are grown large they ſhould have ant's mold. They ſhould be kept very clean, as indeed ſhould all ſinging-birds whatſoever; for otherwiſe they will have the cramp, and perhaps the claws will drop off. In autumn they will ſometimes abſtain from their food for a fortnight, unleſs two or three meal-worms be given them twice or thrice a week, or two or three ſpiders in a day; they muſt likewiſe have a little ſaffron in their water. Figs chopped ſmall among their meat will help them to recover their fleſh. When their legs are cramped, they ſhould be anointed with freſh butter, or capon's fat, three or four days together. If they grow melancholy, put white ſugar-candy into their water, and feed them with ſheep's-heart, giving them a few ants with their eggs.

With regard to adult birds, thoſe that are taken before the twenty-third of April are accounted the beſt, becauſe after that they begin to pair. They uſually haunt woods, coppices, and quickſet hedges, where they may be taken in trap-cages baited with meal-worms. They ſhould be placed as near the ſpot where the bird ſings

ſings as poſſible; and before you fix the trap, turn up the earth twice the breadth of the cage, becauſe they will there look for food. They are alſo taken with lime twigs, placing them upon the hedge where they uſually ſing; and there ſhould be meal-worms ſtuck at proper places to draw them into the ſnare. After they are taken, their wings ſhould be gently tied with thread, to prevent their beating themſelves againſt the cage. This ſhould be firſt hung in a private place, that the bird may not be diſturbed; and it ſhould be fed every two hours, at fartheſt, with ſheep's-heart and egg minced very fine, mixing it with meal-worms. However, the firſt food muſt be worms, ants, caterpillars, and flies. You muſt, to feed the bird, take it in your hand, and open the bill with a ſtick made thick at one end, giving it the inſects, or four or five bits of food as big as peas, to entice it to eat. Its common food ſhould be mixed with ants, ſo that when the bird goes to pick the ants it may pick up ſome of that alſo. The nightingale, when caged, begins to ſing about the latter end of November, and continues its ſong till June.

CHAP.

CHAP. IV.

Of the Canary-bird, and other hard-billed Singing-birds.

THE Canary-bird is now become ſo common, and has continued ſo long in a domeſtic ſtate, that its native habits, as well as its native country, ſeem almoſt forgotten. Though, by the name, it appears that theſe birds came originally from the Canary Iſlands, yet we have it only from Germany, where they are bred up in great numbers, and ſold into different parts of Europe. At what period they were brought into Europe is not well known; but it is certain that about a century ago they were ſold at very high prices, and kept only for the amuſement of the great. They have ſince been multiplied in great abundance; and their price is diminiſhed in proportion to their plenty.

In its native iſlands, a region equally noted for the beauty of its landſcapes and the harmony of its groves, the canary-bird is of a duſky grey colour, and ſo different from thoſe uſually ſeen in Europe, that ſome have even doubted whether it be of the ſame ſpecies. With us, they have that variety of colouring uſual in all domeſtic fowls; ſome white, ſome mottled, ſome beautifully ſhaded with green; but they are more

more eſteemed for their note than their beauty, having a high piercing pipe, as indeed all thoſe of the finch tribe have, continuing for ſome time in one breath without intermiſſion, then raiſing it higher and higher by degrees, with great variety.

It is this that has rendered the canary-bird next to the nightingale the moſt celebrated ſongſter; and, as it is more eaſily reared than any of the ſoft-billed birds, and continues its ſong throughout the year, it is rather the moſt common in our houſes. Rules, therefore, have been laid down, and copious inſtructions given, for breeding theſe birds in a domeſtic ſtate; which, as a part of them may conduce towards the natural hiſtory of the bird, I will take leave to tranſcribe.

In chuſing the canary-bird, thoſe are beſt that appear with life and boldneſs, ſtanding upright upon the perch like a ſparrow-hawk, and not apt to be frighted at every thing that ſtirs. If its eyes look chearful, and not drowſy, it is a ſign of health; but, on the contrary, if it hides its head under the wing, and gathers its body up, theſe are ſymptoms of its being out of order. In chuſing them the melody of the ſong ſhould alſo be minded: ſome will open with the notes of the nightingale, and, running through a variety of modulations, end like the tit-lark. Others will begin like the ſky-lark; and, by a ſoft melodious

lodious turn, fall into the notes of the nightingale. Theſe are leſſons taught this bird in its domeſtic ſtate, and generally taught it by others; but its native note is loud, ſhrill, piercing, and enough to deafen the hearers. There are perſons who admire each of theſe ſongs, but the ſecond is in the moſt general eſtimation.

Canary-birds ſometimes breed all the year round; but they moſt uſually begin to pair in April, and to breed in June and Auguſt. Thoſe are ſaid to be the beſt breeders that are produced between the Engliſh and the French.

Towards the latter end of March, a cock and a hen ſhould be put together in a ſmall cage, where they will peck at each other in the beginning, but will ſoon become thoroughly reconciled. The room where they are kept to breed ſhould be ſo ſituated as to let the birds have the benefit of the morning ſun, and the windows ſhould be of wire, not glaſs, that they may enjoy the benefit of the air. The floor of the room ſhould be kept clean, and ſometimes there ſhould be dry gravel or ſand ſifted upon it. There ſhouid alſo be two windows, one at each end, and ſeveral perches at proper diſtances for the birds to ſettle on, as they fly backwards and forwards. A tree in the middle of the room would be the moſt convenient to divert the birds, and ſometimes to ſerve for building their neſts upon.

In

In Germany they prepare a large room, and build it in the manner of a barn, being much longer than broad, with a ſquare place at each end, and ſeveral holes to go into thoſe ſquare places. In thoſe outlets they plant ſeveral ſorts of trees, in which the birds take great delight to ſing and breed. The bottom of the place they ſtrew with ſand, and upon it caſt rape-ſeed, chick-weed and groundſil, which the old birds feed upon while breeding. In the body of the houſe they put all ſorts of ſtuff for building the neſt, and brooms, one under the other, in all the corners, for the birds to build in. Theſe they ſeparate by partitions from each other, to prevent thoſe above flying down upon, or otherwiſe incommoding, ſuch as breed below. The light alſo is excluded, for no bird is fond of having light come to its neſt.

With us, the apparatus for breeding is leſs expenſive; a little breeding-cage ſometimes ſuffices, but ſeldom any thing more extenſive than a ſmall room. While the birds are pairing it is uſual to feed them with ſoft meat; that is, bread, maw-ſeed, a little ſcalded rape-ſeed, and near a third part of an egg. The room ſhould be furniſhed with ſtuff for making their neſts; ſuch as fine hay, wool, cotton, and hair. Theſe materials ſhould be thoroughly dry, and then mixed and tied together in ſuch a manner that the birds may readily pull out what

what they want. This ſhould be hung in a proper part of the room, and the male will take his turn in building the neſt, ſitting upon the eggs, and feeding the young. They are generally two or three days in building their neſts; the hen commonly lays five eggs; and in the ſpace of fourteen days the young will be excluded. So prolific are theſe birds ſometimes that the female will be ready to hatch a ſecond brood before the firſt are able to quit the neſt. On theſe occaſions ſhe leaves the neſt and the young to provide herſelf with another to lay her new brood in. In the mean time, the male, more faithful to the duties of his truſt, breeds up the young left behind, and fits them for a ſtate of independence.

When the young ones are excluded, the old ones ſhould be ſupplied with a ſufficiency of ſoft food every day, with likewiſe freſh greens, ſuch as cabbage, lettuce, and chick-weed; in June, ſhepherd's purſe; and in July and Auguſt, plantane. They are never to have groundſil after the young are excluded. With theſe different delicacies, the old ones will take particular care to feed and bring up their young; but it is uſual when they can feed themſelves to be taken from the neſt and put into cages. Their meat then is the yolk of an egg boiled hard, with an equal quantity of fine bread, and a little ſcalded rape-ſeed: this muſt be bruiſed till it becomes fine,

fine, and then it may be mixed with a little maw-ſeed; after which, blend all together; which is to be ſupplied them freſh every day.

The canary-bird, by being kept in company with the linnet or the gold-finch, pairs and produces a mixed breed, more like the canary-bird, and reſembling it chiefly in its ſong. Indeed, all this tribe with ſtrong bills and piercing notes, and feeding upon grain, have the moſt ſtrong ſimilitude to each other, and may juſtly be ſuppoſed, as Mr. Buffon imagines, to come from the ſame original. They all breed about the ſame time; they frequent the ſame vegetables; they build in the ſame hedges and trees; and are brought up for the cage with the ſame food and precautions. The linnet, the bull-finch, and the gold-finch, when we know the hiſtory of the canary-bird, have ſcarce any peculiarities that can attract our curioſity, or require our care. The only art neceſſary with all thoſe that have no very fine note is to breed them up under ſome more pleaſing harmoniſt. The gold-finch learns a fine ſong from the nightingale; and the linnet and bull-finch may be taught, forgetting the wild notes of nature, to whiſtle a long and regular tune.

CHAP.

CHAP. V.

Of the Swallow, and its Affinities.

AN idea of any one bird in the former claſſes will give us ſome tolerable conception of the reſt. By knowing the linnet, or the canary-bird, we have ſome notion of the manners of the gold-finch; by exhibiting the hiſtory of the nightingale, we ſee alſo that of the black-cap or the tit-mouſe. But the ſwallow tribe ſeems to be entirely different from all the former: different in their form, different in their habits, and unlike in all the particulars of their hiſtory.

In this tribe is to be found the Goat-ſucker, which may be ſtiled a nocturnal ſwallow: it is the largeſt of this kind, and is known by its tail, which is not forked like that of the common ſwallow. It begins its flight at evening, and makes a loud ſingular noiſe, like the whur of a ſpinning-wheel. To this alſo belongs the Houſe-Swallow, which is too well known to need a deſcription: the Martin, inferior in ſize to the former, and the tail much leſs forked; it differs alſo in its neſt, which is covered at top, while that of the houſe-ſwallow is open; and the Swift, rather larger than the houſe-ſwallow, with all the toes ſtanding forward; in which it differs from

the

the reſt of its kind. All theſe reſemble each other ſo ſtrongly, that it is not without difficulty the ſmaller kinds are known aſunder.

Theſe are all known by their very large mouths, which, when they fly, are always kept open; they are not leſs remarkable for their ſhort ſlender feet, which ſcarce are able to ſupport the weight of their bodies; their wings are of immoderate extent for their bulk; their plumage is gloſſed with a rich purple; and their note is a ſlight twittering, which they ſeldom exert but upon the wing.

This peculiar conformation ſeems attended with a ſimilar peculiarity of manners. Their food is inſects, which they always purſue flying. For this reaſon, during fine weather, when the inſects are moſt likely to be abroad, the ſwallows are for ever upon the wing, and ſeen purſuing their prey with amazing ſwiftneſs and agility. All ſmaller animals, in ſome meaſure, find ſafety by winding and turning, when they endeavour to avoid the greater: the lark thus evades the purſuit of the hawk; and man the crocodile. In this manner, inſects upon the wing endeavour to avoid the ſwallow; but this bird is admirably fitted by nature to purſue them through their ſhorteſt turnings. Beſides a great length of wing, it is alſo provided with a long tail, which, like a rudder, turns it in its moſt rapid motions; and thus, while it is poſ-

ſeſſed

ſeſſed of the greateſt ſwiftneſs, it is alſo poſſeſſed of the moſt extreme agility.

Early, therefore, in the ſpring, when the returning ſun begins to rouze the inſect tribe from their annual ſtate of torpidity, when the gnat and the beetle put off their earthly robes and venture into air, the ſwallow then is ſeen returning from its long migration beyond the ocean, and making its way feebly to the ſhore. At firſt, with the timidity of a ſtranger, it appears but ſeldom, and flies but ſlowly and heavily along. As the weather grows warmer, and its inſect ſupply encreaſes, it then gathers greater ſtrength and activity. But it ſometimes happens that a rainy ſeaſon, by repelling the inſects, ſtints the ſwallow in its food; the poor bird is then ſeen ſlowly ſkimming along the ſurface of the ground, and often reſting after a flight of a few minutes. In general, however, it keeps on the wing, and moving with a rapidity that nothing can eſcape. When the weather promiſes to be fair, the inſect tribe feel the genial influence, and make bolder flights; at which time the ſwallow follows them in their aerial journies, and often riſes to imperceptible heights in the purſuit. When the weather is likely to be foul, the inſects feel the firſt notices of it; and from the ſwallow's following low we are often apprized of the approaching change.

When

When ſummer is fairly begun, and more than a ſufficient ſupply for ſuſtaining the wants of nature every where offers, the ſwallow then begins to think of forming a progeny. The neſt is built with great induſtry and art; particularly by the common ſwallow, which builds it on the tops of chimnies. The martin ſticks it to the eaves of houſes. The goat-ſucker, as we are told, builds it on the bare ground. This neſt is built with mud from ſome neighbouring brook, well tempered with the bill, moiſtened with water for the better adheſion; and ſtill farther kept firm, by long graſs and fibres: within it is lined with goeſe-feathers, which are ever the warmeſt and the neateſt. The martin covers its neſt at top, and has a door to enter at; the ſwallow leaves her's quite open. But our European neſts are nothing to be compared with thoſe the ſwallow builds on the coaſts of China and Coromandel; the deſcription of which I will give in the plain honeſt phraſe of Willughby. "On the ſea-coaſt of "the kingdom of China," ſays he, "a ſort of "party-coloured birds, of the ſhape of ſwal- "lows, at a certain ſeaſon of the year, which is "their breeding time, come out of the mid- "land country to the rocks, and from the foam "or froth of the ſea-water daſhing againſt the "bottom of the rocks, gather a certain clammy, "glutinous matter, perchance the ſpawn of

"whales

" whales and other young fiſhes, of which they " build their neſts, wherein they lay their eggs " and hatch their young. Theſe neſts the " Chineſe pluck from the rocks, and bring " them, in great numbers, into the Eaſt-Indies " to ſell. They are eſteemed, by gluttons, as " great delicacies; who, diſſolving them in " chicken or mutton-broth, are very fond of " them; far before oyſters, muſhrooms, or " other dainty and lickoriſh morſels." What a pity this luxury hath not been introduced among us; and then our great feaſters might be enabled to eat a little more!

The ſwallow uſually lays from five to ſix eggs, of a white colour, ſpeckled with red; and ſometimes breeds twice a year. When the young brood are excluded, the ſwallow ſupplies them very plentifully, the firſt brood particularly, when ſhe finds herſelf capable of producing two broods in a year. This happens when the parents come early, when the ſeaſon is peculiarly mild, and when they begin to pair ſoon. Sometimes they find a difficulty in rearing even a ſingle neſt, particularly when the weather has been ſevere, or their neſts have been robbed in the beginning of the ſeaſon. By theſe accidents, this important taſk is ſometimes deferred to the middle of September.

At the latter end of September they leave us;

us; and for a few days previous to their departure, assemble, in vast flocks, on house-tops, as if deliberating on the fatiguing journey that lay before them. This is no slight undertaking, as their flight is directed to Congo, Senegal, and along the whole Morocco shore. There are some, however, left behind in this general expedition, that do not part till eight or ten days after the rest. These are chiefly the latter weakly broods, which are not yet in a condition to set out. They are sometimes even too feeble to venture, till the setting in of winter; while their parents vainly exhort them to efforts which instinct assures them they are incapable of performing. Thus it often happens, that the wretched little families, being compelled to stay, perish the first cold weather that comes; while the tender parents share the fate of their offspring, and die with their new-fledged brood.

Those that migrate are first observed to arrive in Africa, as Mr. Adanson assures us, about the beginning of October. They are thought to have performed their fatiguing journey in the space of seven days. They are sometimes seen, when interrupted by contrary winds, wavering in their course far off at sea, and lighting upon whatever ship they find in their passage. They then seem spent with famine and fatigue, yet still they boldly venture, when re-

freſhed by a few hours reſt, to renew their flight, and continue the courſe which they had been ſteering before.

Theſe are facts proved by inconteſtible authority; yet it is a doubt whether all ſwallows migrate in this manner, or whether there may not be ſome ſpecies of this animal that, though externally alike, are ſo internally different, as to be very differently affected by the approach of winter. We are aſſured, from many, and theſe not contemptible witneſſes, that ſwallows hide themſelves in holes under ground, joined cloſe together, bill againſt bill, and feet againſt feet. Some inform us that they have ſeen them taken out of the water, and even from under the ice, in bunches, where they are aſſerted to paſs the winter without motion. Reaumur, who particularly intereſted himſelf in this enquiry, received ſeveral accounts of bundles of ſwallows being thus found in quarries and under the water. Theſe men, therefore, have a right to ſome degree of aſſent; and are not to loſe all credit from our ignorance of what they aver.

All, however, that we have hitherto diſſected, are formed within like other birds; and ſeem to offer no obſervable variety. Indeed, that they do not hide themſelves under water, has been pretty well proved, by the noted experiment of Friſch, who tied ſeveral threads died in water-colours,

colours, round the legs of a great number of swallows, that were preparing for their departure: these, upon their return the ensuing summer, brought their threads back with them, no way damaged in their colour; which they most certainly would, if, during the winter, they had been steeped in water: yet still this is a subject on which we must suspend our assent, as Klein, the naturalist, has brought such a number of proofs, in defence of his opinion, that swallows are torpid in winter, as even the most incredulous must allow to have some degree of probability.

CHAP. VI.

Of the Humming-bird, and its Varieties.

HAVING given some history of the manners of the most remarkable birds of which accounts can be obtained, I might now go to a very extensive tribe, remarkable for the splendour and the variety of their plumage: but the description of the colours of a beautiful bird has nothing in it that can inform or entertain; it rather excites a longing, which it is impossible for words to satisfy. Naturalists, indeed, have endeavoured to satisfy this desire, by coloured prints; but, beside that these at best give only a faint resemblance of nature, and are a very

indifferent kind of painting, the bird itſelf has a thouſand beauties, that the moſt exquiſite artiſt is incapable of imitating. They, for inſtance, who imagine they have a complete idea of the beauty of the little tribe of Manikin birds, from the pictures we have of them, will find themſelves deceived, when they compare their drafts with nature. The ſhining greens, the changeable purples, and the gloſſy reds, are beyond the reach of the pencil; and very far beyond the coloured print, which is but a poor ſubſtitute to painting. I have therefore declined entering into a minute deſcription of foreign birds of the ſparrow kind; as ſounds would never convey an adequate idea of colours.

There is one ſpecies, however, that I will conclude the hiſtory of this claſs with; as, though the leaſt, it will certainly be allowed the moſt beautiful of all others. In quadrupedes, the ſmalleſt animals are noxious, ugly, and loathſome; the ſmalleſt of birds are the moſt beautiful, innocent, and ſportive. Of all thoſe that flutter in the garden, or paint the landſcape, the Humming-bird is the moſt delightful to look upon, and the moſt inoffenſive.

Of this charming little animal, there are ſix or ſeven varieties, from the ſize of a ſmall wren, down to that of an humble-bee. An European could never have ſuppoſed a bird exiſting ſo very ſmall, and yet compleatly furniſhed out with a bill,

bill, feathers, wings, and inteſtines, exactly reſembling thoſe of the largeſt kind. A bird not ſo big as the end of one's little finger, would probably be ſuppoſed but a creature of imagination, were it not ſeen in infinite numbers, and as frequent as butterflies in a ſummer's day, ſporting in the fields of America, from flower to flower, and extracting their ſweets with its little bill.

The ſmalleſt humming-bird is about the ſize of an hazel-nut. The feathers on its wings and tail are black; but thoſe on its body, and under its wings, are of a greeniſh brown, with a fine red caſt or gloſs, which no ſilk or velvet can imitate. It has a ſmall creſt on its head, green at the bottom, and as it were gilded at the top; and which ſparkles in the ſun like a little ſtar in the middle of its forehead. The bill is black, ſtraight, ſlender, and of the length of a ſmall pin. The larger humming-bird is near half as big as the common wren, and without a creſt on its head; but, to make amends, it is covered from the throat half way down the belly, with changeable crimſon-coloured feathers, that, in different lights, change to a variety of beautiful colours, much like an opal. The heads of both are ſmall, with very little round eyes as black as jet.

It is inconceivable how much theſe add to the high finiſhing and beauty of a rich luxurious

weſtern landſcape. As ſoon as the ſun is riſen, the humming-birds, of different kinds, are ſeen fluttering about the flowers, without ever lighting upon them. Their wings are in ſuch rapid motion, that it is impoſſible to diſcern their colours, except by their glittering. They are never ſtill, but continually in motion, viſiting flower after flower, and extracting its honey as if with a kiſs. For this purpoſe they are furniſhed with a forky tongue, that enters the cup of the flower, and extracts its nectared tribute. Upon this alone they ſubſiſt. The rapid motion of their wings brings out an humming ſound, from whence they have their name; for whatever divides the air ſwiftly, muſt thus produce a murmur.

The neſts of theſe birds are not leſs curious, than the reſt: they are ſuſpended in the air, at the point of the twigs of an orange, a pomegranate, or a citron-tree; ſometimes even in houſes, if they find a ſmall and convenient twig for the purpoſe. The female is the architect, while the male goes in queſt of materials; ſuch as cotton, fine moſs, and the fibres of vegetables. Of theſe materials a neſt is compoſed, of about the ſize of an hen's egg cut in two, admirably contrived, and warmly lined with cotton. They lay two eggs at a time, and never more, about the ſize of ſmall peas, and as white as ſnow, with here and there a yellow ſpeck. The male and the female ſit upon the neſt by turns; but the female

male takes to herſelf the greateſt ſhare. She ſeldom quits the neſt, except a few minutes in the morning and evening, when the dew is upon the flowers, and their honey in perfection. During this ſhort interval, the male takes her place; for, as the egg is ſo ſmall, the expoſing it ever ſo ſhort a time to the weather, would be apt to injure its contents, the ſurface expoſed being ſo great in compariſon to the bulk. The time of incubation continues twelve days; at the end of which the young ones appear, much about the ſize of a blue-bottle fly. They are at firſt bare; by degrees they are covered with down; and, at laſt, feathers ſucceed, but leſs beautiful at firſt than thoſe of the old ones.

"Father Labat's companion, in the miſſion "to America, found the neſt of an humming-"bird, in a ſhed that was near the dwelling-"houſe, and took it in, at a time when the "young ones were about fifteen or twenty "days old; he then placed them in a cage at "his chamber-window, to be amuſed by their "ſportive flutterings: but he was ſoon ſur-"priſed to ſee the old ones, that came and fed "their brood regularly every hour in the day. "By theſe means they themſelves ſoon grew ſo "tame that they ſeldom quitted the chamber; "but, without any conſtraint, came to live "with their young ones. All four have fre-"quently come to perch upon their maſter's

" hand, chirruping as if they had been at liber-
" ty abroad. He fed them with a very fine clear
" paſte, made of wine, biſcuit, and ſugar.
" They thruſt their tongues into this paſte, till
" they were ſatisfied, and then fluttered and
" chirruped about the room. I never beheld
" any thing more agreeable," continues he,
" than this lovely little family, that had taken
" poſſeſſion of my companion's chamber, and
" that flew out and in juſt as they thought
" proper; but were ever attentive to the voice
" of their maſter, when he called them. In
" this manner they lived with him for above
" ſix months; but, at a time when he expected
" to ſee a new colony formed, he unfortunately
" forgot to tie up their cage to the ceiling at
" night, to preſerve them from the rats, and he
" found they were devoured in the morning."

Theſe birds, on the continent of America, continue to flutter the year round; as their food, which is the honey of flowers, never forſakes them in thoſe warm latitudes where they are found. But it is otherwiſe in the iſlands of the Antilles, where, when the winter ſeaſon approaches, they retire, and, as ſome ſay, continue in a torpid ſtate during the ſeverity of that ſeaſon. At Surinam and Jamaica, where they conſtantly have flowers, theſe beautiful birds are never known to diſappear.

It is a doubt whether or not theſe birds have

a con-

a continued note of ſinging. All travellers agree that, beſide the humming noiſe produced by their wings, they have a little interrupted chirrup; but Labat aſſerts, that they have a moſt pleaſing melancholy melody in their voices, though ſmall and proportioned to the organs which produce it. It is very probable that, in different places, their notes are alſo different; and as there are ſome that continue torpid all the winter, there may likewiſe be ſome with agreeable voices, though the reſt may in general be ſilent.

The Indians formerly made great uſe of this pretty bird's plumage, in adorning their belts and head-dreſs. The children take them in the fields upon rings ſmeared with bird-lime: they approach the place where the birds are flying, and twirling their rings in the air, ſo allure them, either by the colour or the ſound, that the ſimple little creature comes to reſt upon the ring, and is ſeized. They are then inſtantly killed and gutted, and hung up in the chimney to dry. Thoſe who take greater care, dry them in a ſtove, which is not ſo likely to injure the plumage as the foregoing method. Their beautiful feathers were once the ornament of the higheſt rank of ſavage nobility: but at preſent, they take the bird rather for the purpoſe of ſelling it as a curioſity to the Europeans, than that of ornament for themſelves. All the taſte for

ſavage finery is wearing out faſt, even among the Americans. They now begin to adopt, if not the dreſſes of Europe, at leaſt the materials of which they are compoſed. The wandering warrior is far from thinking himſelf fine at preſent with his bow and his feathered crown: his ambition reaches to higher ornaments; a gun, a blue ſhirt, and a blanket.

OF

BIRDS

OF THE

CRANE KIND.

PART V.

CHAP. I.

Of Birds of the Crane Kind in General.

THE progreſſions of Nature from one claſs of beings to another, are always by ſlow and almoſt imperceptible degrees. She has peopled the woods and the fields with a variety of the moſt beautiful birds; and, to leave no part of her extenſive territories untenanted, ſhe has ſtocked the waters with its feathered inhabitants alſo: ſhe has taken the ſame care in providing for the wants of her animals in this element, as ſhe has done with reſpect to thoſe of the other: ſhe has uſed as much precaution to render water-fowl fit for ſwimming, as ſhe did in forming land-fowl for flight: ſhe has defended their feathers with a natural oil, and united their toes by a webbed membrane; by which contrivances they have at once ſecurity and motion. But between the claſſes of land-birds that ſhun the water, and of water-fowl that are made for ſwimming and living on it, ſhe has formed a very numerous tribe of birds, that ſeem to partake of a middle nature; that, with divided toes, ſeemingly fitted to live upon land, are at the ſame time furniſhed with appetites that chiefly attach them to the waters.

Theſe

Theſe can properly be called neither land-birds nor water-fowl, as they provide all their ſuſtenance from watery places, and yet are unqualified to ſeek it in thoſe depths where it is often found in greateſt plenty.

This claſs of birds, of the crane kind, are to be diſtinguiſhed from others rather by their appetites than their conformation. Yet even in this reſpect they ſeem to be ſufficiently diſcriminated by Nature: as they are to live among the waters, yet are incapable of ſwimming in them, moſt of them have long legs, fitted for wading in ſhallow waters, or long bills proper for groping in them.

Every bird of this kind, habituated to marſhy places, may be known, if not by the length of its legs, at leaſt by the ſcaly ſurface of them. Thoſe who have obſerved the legs of a ſnipe or a woodcock, will eaſily perceive my meaning; and how different the ſurface of the ſkin that covers them is from that of the pigeon or the partridge. Moſt birds of this kind alſo, are bare of feathers half way up the thigh; at leaſt, in all of them, above the knee. Their long habits of wading in the waters, and having their legs continually in moiſture, prevents the growth of feathers on thoſe parts; ſo that there is a ſurpriſing difference between the leg of a crane, naked of feathers almoſt up to the body, and the falcon, booted almoſt to the very toes.

The

The bill alſo is very diſtinguiſhable in moſt of this claſs. It is, in general, longer than that of other birds, and in ſome finely fluted on every ſide; while at the point it is poſſeſſed of extreme ſenſibility, and furniſhed with nerves, for the better feeling their food at the bottom of marſhes, where it cannot be ſeen. Some birds of this claſs are thus fitted with every convenience: they have long legs, for wading; long necks, for ſtooping; long bills, for ſearching; and nervous points, for feeling. Others are not ſo amply provided for; as ſome have long bills, but legs of no great length; and others have long necks, but very ſhort legs. It is a rule which univerſally holds, that where the bird's legs are long, the neck is alſo long in proportion. It would indeed be an incurable defect in the bird's conformation, to be lifted upon ſtilts above its food, without being furniſhed with an inſtrument to reach it.

If we conſider the natural power of this claſs, in a comparative view, they will ſeem rather inferior to thoſe of every other tribe. Their neſts are more ſimple than thoſe of the ſparrow; and their methods of obtaining food leſs ingenious than thoſe of the falcon: the pie exceeds them in cunning; and though they have all the voraciouſneſs of the poultry tribe, they want their fecundity. None of this kind, therefore, have been taken into man's ſociety, or under his protection;

protection; they are neither caged, like the nightingale; nor kept tame, like the turkey; but lead a life of precarious liberty, in fens and marſhes, at the edges of lakes, and along the ſea-ſhore. They all live upon fiſh or inſects, one or two only excepted; even thoſe that are called mudſuckers, ſuch as the ſnipe and the woodcock, it is more than probable, grope the bottom of marſhy places only for ſuch inſects as are depoſited there by their kind, and live in a vermicular ſtate, in pools and plaſhes, till they take wing, and become flying inſects.

All this claſs, therefore, that are fed upon inſects, their food being eaſily digeſtible, are good to be eaten; while thoſe who live entirely upon fiſh, abounding in oil, acquire in their fleſh the rancidity of their diet, and are, in general, unfit for our tables. To ſavages indeed, and ſailors on a long voyage, every thing that has life ſeems good to be eaten; and we often find them recommending thoſe animals as dainties, which they themſelves would ſpurn at, after a courſe of good living. Nothing is more common in their journals than ſuch accounts as theſe—"This day we ſhot a fox—pretty good "eating: this day we ſhot a heron—pretty good "eating: and this day we killed a turtle—— "which they rank with the heron and the fox, "as pretty good eating." Their accounts, therefore, of the fleſh of theſe birds, are not to be

be depended upon; and when they cry up the heron or the ſtork of other countries as luxurious food, we muſt always attend to the ſtate of their appetites who give the character.

In treating of this claſs of birds, it will be beſt to obſerve the ſimpleſt method poſſible; neither to load the memory with numerous diſtinctions, nor yet confuſe the imagination, by a total want of arrangement. I will therefore deſcribe ſome of the larger ſorts ſeparately; as in an hiſtory of birds, each of theſe demands peculiar diſtinction. The crane, the ſtork, the Baleariс crane, the heron, the bittern, with ſome others, may require a ſeparate hiſtory. Some particular tribes may next offer, that may very naturally be claſſed together: and as for all the ſmaller and leaſt remarkable ſorts, they may be grouped into one general deſcription.

CHAP. II.

The Crane.

THERE is ſomething extraordinary in the different accounts we have of this bird's ſize and dimenſions. Willughby and Pennant make the Crane from five to ſix feet long, from the tip to the tail. Other accounts ſay, that it is above five feet high; and others, that it is as tall as a man. From the many which I myſelf

myſelf had ſeen, I own this imputed magnitude ſurpriſed me; as from memory I was convinced, they could neither be ſo long nor ſo tall. Indeed, a bird, the body of which is not larger than that of a turkey-hen, and acknowledged on all hands not to weigh above ten pounds, cannot eaſily be ſuppoſed to be almoſt as long as an oſtrich. Briſſon, however, ſeems to give this bird its real dimenſions, when he deſcribes it as ſomething leſs than the brown ſtork, about three feet high, and about four from the tip to the tail. Still, however, the numerous teſtimonies of its ſuperior ſize are not to be totally rejected; and perhaps, that from which Briſſon took his dimenſions, was one of the ſmalleſt of the kind.

The crane, taking its dimenſions from him, is exactly three feet four inches from the tip to the tail, and four feet from the head to the toe. It is a tall, ſlender bird, with a long neck and long legs. The top of the head is covered with black briſtles, and the back of it is bald and red, which ſufficiently diſtinguiſhes this bird from the ſtork, to which it is very nearly allied in ſize and figure. The plumage, in general, is aſh-coloured; and there are two large tufts of feathers, that ſpring from the pinion of each wing. Theſe bear a reſemblance to hair, and are finely curled at the ends, which the bird has a power of erecting and depreſſing at pleaſure.

Geſner

Gesner says, that these feathers, in his time, used to be set in gold, and worn as ornaments in caps.

Such are the dimensions of a bird, concerning which, not to mention modern times, there have been more fables propagated than of any other. It is a bird with which all the ancient writers are familiar; and, in describing it, they have not failed to mix imagination with history. From the policy of the cranes, they say, we are to look for an idea of the most perfect republic amongst ourselves; from their tenderness to their decrepid parents, which they take care to nourish, to cherish, and support when flying, we are to learn lessons of filial piety; but particularly from their conduct in fighting with the pigmies of Ethiopia, we are to receive our maxims in the art of war. In early times, the history of nature fell to the lot of poets only, and certainly none could describe it so well; but it is a part of their province to embellish also; and when this agreeable science was claimed by a more sober class of people, they were obliged to take the accounts of things as they found them; and, in the present instance, fable ran down blended with truth to posterity.

In these accounts, therefore, there is some foundation of truth; yet much more has been added by fancy. The crane is certainly a very social bird, and they are seldom seen alone. Their

Their uſual method of flying or ſitting is in flocks of fifty or ſixty together; and while a part feed, the reſt ſtand like centinels upon duty. The fable of their ſupporting their aged parents, may have ariſen from their ſtrict connubial affection; and as for their fighting with the pigmies, it may not be improbable but that they have boldly withſtood the invaſions of monkies coming to rob their neſts; for, in this caſe, as the crane lives upon vegetables, it is not probable that it would be the firſt aggreſſor.

However this be, the crane is a wandering, ſociable bird, that, for the moſt part, ſubſiſts upon vegetables; and is known in every country of Europe, except our own. There is no part of the world, ſays Belonius, where the fields are cultivated, that the crane does not come in with the huſbandman for a ſhare in the harveſt. As they are birds of paſſage, they are ſeen to depart and return regularly at thoſe ſeaſons when their proviſion invites or repels them. They generally leave Europe about the latter end of autumn, and return in the beginning of ſummer. In the inland parts of the continent, they are ſeen croſſing the country, in flocks of fifty or an hundred, making from the northern regions towards the ſouth. In theſe migrations, however, they are not ſo reſolutely bent upon going forward, but that if a field of corn offers

offers in their way, they will ſtop a while to regale upon it: on ſuch occaſions they do incredible damage, chiefly in the night; and the huſbandman, who lay down in joyful expectation, riſes in the morning to ſee his fields laid entirely waſte, by an enemy, whoſe march is too ſwift for his vengeance to overtake.

Our own country is free from their viſits; not but that they were formerly known in this iſland, and held in great eſtimation, for the delicacy of their fleſh: there was even a penalty upon ſuch as deſtroyed their eggs; but, at preſent, they never go ſo far out of their way. Cultivation and populouſneſs go hand in hand; and though our fields may offer them a greater plenty, yet it is ſo guarded, that the birds find the venture greater than the enjoyment; and probably we are much better off by their abſence than their company. Whatever their fleſh might once have been, when, as Plutarch tells us, cranes were blinded and kept in coops, to be fattened for the tables of the great in Rome; or, as they were brought up, ſtuffed with mint and rue, to the tables of our nobles at home; at preſent, they are conſidered all over Europe as wretched eating. The fleſh is fibrous and dry, requiring much preparation to make it palatable; and even after every art, it is fit only for the ſtomachs of ſtrong and labouring people.

The

The cold arctic region ſeems to be this bird's favourite abode. They come down into the more ſouthern parts of Europe rather as viſitants than inhabitants: yet it is not well known in what manner they portion-out their time, to the different parts of the world. The migrations of the fieldfare or thruſh, are obvious, and well known; they go northward or ſouthward, in one ſimple track; when their food fails them here, they have but one region to go to. But it is otherwiſe with the crane; he changes place, like a wanderer: he ſpends the autumn in Europe; he then flies off, probably to ſome more ſouthern climate, to enjoy a part of the winter; returns to Europe in the ſpring; croſſes up to the north in ſummer; viſits thoſe lakes that are never dry; and then comes down again, to make depredations upon our cultivated grounds, in autumn. Thus, Geſner aſſures us, that the cranes uſually began to quit Germany, from about the eleventh of September to the ſeventeenth of October; from thence they were ſeen flying ſouthward by thouſands; and Redi tells us, they arrive in Tuſcany a ſhort time after. There they tear up the fields, newly ſown, for the grain juſt committed to the ground, and do great miſchief. It is to be ſuppoſed that, in the ſeverity of winter, they go ſouthward, ſtill nearer the line. They again appear in the fields of Piſa, regularly about the

the twentieth of February, to anticipate the ſpring.

In theſe journeys it is amazing to conceive the heights to which they aſcend, when they fly. Their note is the loudeſt of all other birds; and that is often heard in the clouds, when the bird itſelf is entirely unſeen. As it is light for its ſize, and ſpreads a large expanſe of wing, it is capable of floating, at the greateſt height, where the air is lighteſt; and as it ſecures its ſafety, and is entirely out of the reach of man, it flies in tracts which would be too fatiguing for any other birds to move forward in.

In theſe aerial journeys, though unſeen themſelves, they have the diſtincteſt viſion of every object below. They govern and direct their flight by their cries; and exhort each other to proceed or to deſcend, when a fit opportunity offers for depredation. Their voice, as was obſerved, is the loudeſt of all the feathered tribe; and its peculiar clangor ariſes from the very extraordinary length and contortion of the windpipe. In quadrupedes, the windpipe is ſhort, and the glottis, or cartilages that form the voice, are at that end of it which is next the mouth: in water-fowl the windpipe is longer, but the cartilages that form the voice are at the other end, which lies down in their belly. By this means they have much louder voices, in proportion to their ſize, than any other animals

whatever; for the note, when formed below, is reverberated through all the rings of the windpipe, till it reaches the air. But the voice of the duck or the gooſe, is nothing to be compared to that of the crane, whoſe windpipe is not only made in the ſame manner with theirs, but is above twenty times as long. Nature ſeems to have beſtowed much pains in lengthening out this organ. From the outſide, it enters through the fleſh into the breaſt-bone, which hath a great cavity within to receive it. There, being thrice reflected, it goes out again at the ſame hole, and ſo turns down to the lungs, and thus enters the body a ſecond time. The loud clangorous ſound which the bird is thus enabled to produce, is, when near, almoſt deafening: however, it is particularly ſerviceable to the animal itſelf, either during its migrations or its ſtay: by it the flock is encouraged in their journies; and if, while they are feeding, which is uſually performed in profound ſilence, they are invaded on any ſide, the bird that firſt perceives the danger, is ſure to ſound the alarm, and all are ſpeedily upon the wing.

As they riſe but heavily, they are very ſhy birds, and ſeldom let the fowler approach them. Their depredations are uſually made in the darkeſt nights; at which time they enter a field of corn, and trample it down, as if it had been croſſed over by a regiment of men. On other

occaſions, they chuſe ſome extenſive ſolitary marſh, where they range themſelves all day, as if they were in deliberation; and not having that grain which is moſt to their appetites, wade the marſhes, for inſects, and other food, which they can procure with leſs danger.

Corn is their favourite food; but there is ſcarce any other that comes amiſs to them. Redi, who opened ſeveral, found the ſtomach of one full of the herb called dandelion; that of another was filled with beans; a third had a great quantity of clover in its ſtomach; while that of two others was filled with earth-worms and beetles: in ſome he found lizards and ſea-fiſh; in others, ſnails, graſs, and pebbles, ſwallowed perhaps for medicinal purpoſes. It ſeems, therefore, that theſe birds are eaſily ſupplied; and that they are noxious to corn-fields but on ſome particular occaſions.

In general it is a peaceful bird, both in its own ſociety, and with reſpect to thoſe of the foreſt. Though ſo large in appearance, a little falcon purſues, and often diſables it. The method is, with thoſe who are fond of hawking, to fly ſeveral hawks together againſt it; which the crane endeavours to avoid, by flying up perpendicularly, till the air becomes too thin to ſupport it any higher. The hawk, however, ſtill bears it company; and though leſs fitted for floating in ſo thin a medium, yet,

poſſeſſed of greater rapidity, it ſtill gains the aſcendency. They both often riſe out of ſight; but ſoon the ſpectator, who keeps his eye fixed above, perceives them, like two ſpecks, beginning to appear: they gather on his eye for a little ſpace, and ſhortly after come tumbling perpendicularly together, with great animoſity on the ſide of the hawk, and a loud ſcreaming on that of the crane. Thus driven to extremity, and unable to fly, the poor animal throws itſelf upon its back, and in that ſituation make a moſt deſperate defence; till the ſportſman coming up, generally puts an end to the conteſt with its life.

It was once the barbarous cuſtom to breed up cranes to be thus baited; and young ones were taken from the neſt, to be trained up for this cruel diverſion. It is an animal eaſily tamed; and, if we can believe Albertus Magnus, has a particular affection for man. This quality, however, was not ſufficient to guard it from being made the victim of his fierce amuſements. The female, which is eaſily diſtinguiſhed from the male, by not being bald behind as he is, never lays above two eggs at a time; being like thoſe of a gooſe, but of a bluiſh colour. The young ones are ſoon fit to fly, and then the parents forſake them to ſhift for themſelves; but, before this time, they are led forth to the places where their food is moſt eaſily found.

Though

Though yet unfledged, they run with ſuch ſwiftneſs that a man cannot eaſily overtake them. We are told, that as they grow old, their plumage becomes darker; and, as a proof of their longevity, Aldrovandus aſſures us, that a friend of his kept one tame for above forty years.

Whatever may have been the diſpoſition of the great, the vulgar of every country, to this day, bear the crane a compaſſionate regard. It is poſſible the ancient prejudices in its favour, which once having been planted, are eradicated but ſlowly, may ſtill continue to operate. In ſome countries it is conſidered as an heinous offence to kill a crane; and though the legiſlature declines to puniſh, yet the people do not fail to reſent, the injury. The crane, they, in ſome meaſure, conſider as the prophet of the ſeaſon: upon its approach or delay they regulate the periods of their rural œconomy. If their favourite bird comes early in the ſeaſon, they expect a plentiful ſummer; if he is ſlow in his viſits, they then prepare for an unfavourable ſpring. Whatever wiſdom there may be in deſpiſing the prejudices of the vulgar, there is but little in condemning them. They have generally had their origin in good motives; and it ſhould never be our endeavours to ſuppreſs any tender emotions of friendſhip or pity, in thoſe hard breaſts that are, in general, unſuſceptible of either.

CHAP. III.

The Stork.

IF we regard the Stork externally only, we ſhall be very apt to confound it with the crane. It is of the ſame ſize; it has the ſame formation as to the bill, neck, legs, and body, except that it is ſomething more corpulent. Its differences are but very ſlight; ſuch as the colour, which in the crane is aſh and black, but in the ſtork is white and brown. The nails of the toes of the ſtork alſo are very peculiar, not being clawed like thoſe of other birds, but flat like the nails of a man.

Theſe, however, are but very ſlight differences; and its true diſtinctions are to be taken rather from its manners than its form. The crane has a loud piercing voice; the ſtork is ſilent, and produces no other noiſe than the clacking of its under chap againſt the upper: the crane has a ſtrange convolution of the wind-pipe through the breaſt-bone; the ſtork's is formed in the uſual manner: the crane feeds moſtly upon vegetables and grain; the ſtork preys entirely upon frogs, fiſhes, birds, and ſerpents: the crane avoids towns and populous places; the ſtork lives always in or near them: the crane lays but two eggs, and the ſtork generally

nerally four. Theſe are diſtinctions fully ſufficient to mark the ſpecies, notwithſtanding the ſimilitude of their form.

Storks are birds of paſſage, like the former; but it is hard to ſay whence they come, or whither they go. When they withdraw from Europe, they all aſſemble on a particular day, and never leave one of their company behind them. They take their flight in the night; which is the reaſon the way they go has never been obſerved. They generally return into Europe in the middle of March, and make their neſts on the tops of chimnies and houſes as well as of high trees. The females lay from two to four eggs, of the ſize and colour of thoſe of geeſe; and the male and female ſit upon them by turns. They are a month in hatching; and when their young are excluded, they are particularly ſolicitous for their ſafety.

As the food of theſe birds conſiſts in a great meaſure of frogs and ſerpents, it is not to be wondered at that different nations have paid them a particular veneration. The Dutch are very ſolicitous for the preſervation of the ſtork in every part of their republic. This bird ſeems to have taken refuge among their towns; and builds on the tops of their houſes without any moleſtation. There it is ſeen reſting familiarly in their ſtreets, and protected as well by the laws as the prejudices of the people. They

have even got an opinion that it will only live in a republic; and that ſtory of its filial piety, firſt falſely propagated of the crane, has in part been aſcribed to the ſtork. But it is not in republics alone that the ſtork is ſeen to reſide, as there are few towns on the continent, in low marſhy ſituations, but have the ſtork as an inmate among them; as well the deſpotic princes of Germany as the little republics of Italy.

The ſtork ſeems a general favourite even among the moderns; but with the ancient Egyptians their regard was carried even to adoration. This enlightened people, who worſhipped the Deity in his creatures, paid divine honours to the ibis, as is univerſally known. It has been uſually ſuppoſed that the ancient ibis is the ſame with that which goes at preſent by the ſame name; a bird of the ſtork kind, of about the ſize of a curlew, all over black, with a bill very thick in the beginning, but ending in a point, for the better ſeizing its prey, which is caterpillars, locuſts, and ſerpents. But, however uſeful the modern ibis may be in ridding Egypt, where it reſides, of the vermin and venomous animals that infeſt it; yet it is much doubted whether this be the ſame ibis to which the ancients paid their adoration. Maillet, the French conſul at Cairo, obſerves, that it is very hard to determine what bird the ancient

cient ibis certainly was, becauſe there are cranes, ſtorks, hawks, kites, and falcons, that are all equal enemies to ſerpents, and devour a vaſt number. He farther adds, that in the month of May, when the winds begin to blow from the internal parts of Africa, there are ſeveral ſorts of birds that come down from Upper Egypt, from whence they are driven by the rains, in ſearch of a better habitation, and that it is then they do this country ſuch ſignal ſervices. Nor does the figure of this bird hieroglyphically repreſented on their pillars mark it ſufficiently to make the diſtinction. Beſides, the modern ibis is not peculiar to Egypt, as it is to be ſeen but at certain ſeaſons of the year; whereas we are informed by Pliny, that this bird was ſeen no where elſe. It is thought, therefore, that the true ibis is a bird of the vulture kind, deſcribed above, and called by ſome the capon of Pharaoh, which not only is a devourer of ſerpents, but will follow the caravans that go to Mecca, to feed upon the offal of the animals that are killed on the journey.

CHAP. IV.

Of the Balearic and other foreign Cranes.

HAVING ended the laſt chapter with doubts concerning the ibis, we ſhall begin this with doubts concerning the Balearic Crane. Pliny has deſcribed a bird of the crane kind with a topping reſembling that of the green wood-pecker. This bird for a long time continued unknown, till we became acquainted with the birds of tropical climates, when one of the crane kind with a topping was brought into Europe, and deſcribed by Aldrovandus as Pliny's Balearic Crane. Hence theſe birds, which have ſince been brought from Africa and the Eaſt in numbers, have received the name of Balearic Cranes, but without any juſt foundation. The real Balearic Crane of Pliny ſeems to be the leſſer aſh-coloured heron, with a topping of narrow white feathers, or perhaps the egret, with two long feathers that fall back from the ſides of the head. The bird that we are about to deſcribe under the name of the Balearic Crane was unknown to the ancients; and the heron or egret ought to be reinſtated in their juſt title to that name.

When we ſee a very extraordinary animal, we are naturally led to ſuppoſe that there muſt

be ſomething alſo remarkable in its hiſtory to correſpond with the ſingularity of its figure. But it often happens that hiſtory fails on thoſe occaſions where we moſt deſire information. In the preſent inſtance, in particular, no bird preſents to the eye a more whimſical figure than this, which we muſt be content to call the Balearic Crane. It is pretty nearly of the ſhape and ſize of the ordinary crane, with long legs and a long neck, like others of the kind; but the bill is ſhorter, and the colour of the feathers of a dark greeniſh grey. The head and throat form the moſt ſtriking part of this bird's figure. On the head is ſeen ſtanding up a thick round creſt, made of briſtles, ſpreading every way, and reſembling rays ſtanding out in different directions. The longeſt of theſe rays are about three inches and an half; and they are all topped with a kind of black taſſels, which give them a beautiful appearance. The ſides of the head and cheeks are bare, whitiſh, and edged with red, while underneath the throat hangs a kind of bag or wattle, like that of a cock, but not divided into two. To give this odd compoſition a higher finiſhing, the eye is large and ſtaring; the pupil black and big, ſurrounded with a gold-coloured iris that completes the bird's very ſingular appearance.

From ſuch a peculiar figure, we might be led to wiſh for a minute hiſtory of its manners; but

of theſe we can give but ſlight information. This bird comes from the coaſt of Africa and the Cape de Verd Iſlands. As it runs, it ſtretches out its wings, and goes very ſwiftly, otherwiſe its uſual motion is very ſlow. In their domeſtic ſtate, they walk very deliberately among other poultry, and ſuffer themſelves to be approached (at leaſt it was ſo with that I ſaw) by every ſpectator. They never rooſt in houſes: but about night, when they are diſpoſed to go to reſt, they ſearch out ſome high wall, on which they perch in the manner of a peacock. Indeed, they ſo much reſemble that bird in manners and diſpoſition, that ſome have deſcribed them by the name of the ſea-peacock; and Ray has been inclined to rank them in the ſame family. But, though their voice and rooſting be ſimilar, their food, which is entirely upon greens, vegetables, and barley, ſeems to make ſome difference.

In this chapter of foreign birds of the crane kind, it will be proper to mention the Jabiru and the Jabiru Guacu, both natives of Braſil. Of theſe great birds of the crane kind we know but little, except the general out-line of their figure, and the enormous bills, which we often ſee preſerved in the cabinets of the curious. The bill of the latter is red, and thirteen inches long; the bill of the former is black, and is found to be eleven. Neither of them, however,

are

are of a ſize proportioned to their immoderate length of bill. The jabiru guacu is not above the ſize of a common ſtork, while the jabiru with the ſmalleſt bill exceeds the ſize of a ſwan. They are both covered with white feathers, except the head and neck, that are naked; and their principal difference is in the ſize of the body and the make of the bill; the lower chap of the jabiru guacu being broad, and bending upwards.

A bird ſtill more extraordinary may be added to this claſs, called the Anhima, and, like the two former, a native of Braſil. This is a water-fowl of the rapacious kind, and bigger than a ſwan. The head, which is ſmall for the ſize of the body, bears a black bill, which is not above two inches long; but what diſtinguiſhes it in particular is a horn growing from the forehead as long as the bill, and bending forward like that of the fabulous unicorn of the ancients. This horn is not much thicker than a crow-quill, as round as if it were turned in a lathe, and of an ivory colour. But this is not the only inſtrument of battle this formidable bird carries; it ſeems to be armed at all points; for at the fore-part of each wing, at the ſecond joint, ſpring two ſtraight triangular ſpurs, about as thick as one's little finger: the foremoſt of theſe goads or ſpurs is above an inch long; the hinder is ſhorter, and both of a duſky colour.

The claws alſo are long and ſharp; the colour is black and white; and they cry terribly loud, ſounding ſomething like Vyhoo Vyhoo. They are never found alone, but always in pairs; the cock and hen prowl together; and their fidelity is ſaid to be ſuch, that when one dies, the other never departs from the carcaſe, but dies with its companion. It makes its neſt of clay, near the bodies of trees, upon the ground, of the ſhape of an oven.

One bird more may be ſubjoined to this claſs, not for the oddity of its figure, but the peculiarity of its manners. It is vulgarly called by our ſailors the Buffoon Bird, and by the French the Demoiſelle, or Lady. The ſame qualities have procured it theſe different appellations from two nations who, on more occaſions than this, look upon the ſame objects in very different lights. The peculiar geſtures and contortions of this bird, the proper name of which is the Numidian Crane, are extremely ſingular; and the French, who are ſkilled in the arts of elegant geſticulation, conſider all its motions as lady-like and graceful. Our Engliſh ſailors however, who have not entered ſo deeply into the dancing art, think, that while thus in motion the bird cuts but a very ridiculous figure. It ſtoops, riſes, lifts one wing, then another, turns round, ſails forward, then back again; all which highly diverts our ſeamen; not imagining, perhaps, that

that all these contortions are but the aukward expression not of the poor animal's pleasures but its fears.

It is a very scarce bird; the plumage is of a leaden grey; but it is distinguished by fine white feathers, consisting of long fibres, which fall from the back of the head, about four inches long; while the fore-part of the neck is adorned with black feathers, composed of very fine, soft, and long fibres, that hang down upon the stomach, and give the bird a very graceful appearance. The ancients have described a buffoon bird, but there are many reasons to believe that theirs is not the Numidian crane. It comes from that country from whence it has taken its name.

CHAP. V.

Of the Heron, and its Varieties.

BIRDS of the crane, the stork, and the heron kind, bear a very strong affinity to each other; and their differences are not easily discernible. As for the crane and the stork, they differ rather in their nature and internal conformation than in their external figure; but still they may be known asunder, as well by their colour as by the stork's claws, which are very peculiar, and more resembling a man's nails than

than the claws of a bird. The heron may be diſtinguiſhed from both, as well by its ſize, which is much leſs, as by its bill, which in proportion is much longer; but particularly by the middle claw on each foot, which is toothed like a ſaw, for the better ſeizing and holding its ſlippery prey. Should other marks fail, however, there is an anatomical diſtinction, in which herons differ from all other birds; which is, that they have but one cæcum, and all other birds have two.

Of this tribe, Briſſon has enumerated not leſs than forty-ſeven ſorts, all differing in their ſize, figure, and plumage; and with talents adapted to their place of reſidence, or their peculiar purſuits. But, how various ſoever the heron kind may be in their colours or their bills, they all ſeem poſſeſſed of the ſame manners, and have but one character of cowardice and rapacity, indolence, yet inſatiable hunger. Other birds are found to grow fat by an abundant ſupply of food; but theſe, though exceſſively deſtructive and voracious, are ever found to have lean and carrion bodies, as if not even plenty were ſufficient for their ſupport.

The common heron is remarkable light, in proportion to its bulk, ſcarce weighing three pounds and an half, yet it expands a breadth of wing which is five feet from tip to tip. Its bill is very long, being five inches from the point to the

the baſe; its claws are long, ſharp, and the middlemoſt toothed like a ſaw. Yet, thus armed as it appears for war, it is indolent and cowardly, and even flies at the approach of a ſparrow-hawk. It was once the amuſement of the great to purſue this timorous creature with the falcon; and heron-hawking was ſo favourite a diverſion among our anceſtors, that laws were enacted for the preſervation of the ſpecies; and the perſon who deſtroyed their eggs was liable to a penalty of twenty ſhillings for each offence.

At preſent, however, the defects of the ill-judged policy of our anceſtors is felt by their poſterity; for, as the amuſement of hawking has given place to the more uſeful method of ſtocking fiſh-ponds, the heron is now become a moſt formidable enemy. Of all other birds, this commits the greateſt devaſtation in freſh-waters; and there is ſcarce a fiſh, though never ſo large, that he will not ſtrike at and wound, though unable to carry it away. But the ſmaller fry are his chief ſubſiſtence; theſe, purſued by their larger fellows of the deep, are obliged to take refuge in ſhallow waters, where they find the heron a ſtill more formidable enemy. His method is to wade as far as he can go into the water, and there patiently wait the approach of his prey, which when it comes within ſight, he darts upon with inevitable aim. In this manner he is found to deſtroy more in a week than

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an otter in three months. "I have ſeen an "heron," ſays Willughby, "that had been "ſhot, that had ſeventeen carps in his belly at "once, which he will digeſt in ſix or ſeven "hours, and then to fiſhing again. I have ſeen a "carp," continues he, "taken out of a heron's "belly, nine inches and an half long. Several "gentlemen who kept tame herons, to try what "quantity one of them would eat in a day, "have put ſeveral ſmaller roach and dace in a "tub; and they have found him eat fifty in a "day, one day with another. In this manner a "ſingle heron will deſtroy fifteen thouſand carp "in a ſingle half year."

So great are the digeſtive powers of this freſh-water tyrant, and ſo detrimental to thoſe who ſtock ponds with fiſh. In general, he is ſeen taking his gloomy ſtand by the lake ſide, as if meditating miſchief, motionleſs and gorged with plunder. His uſual attitude on this occaſion is to ſink his long neck between his ſhoulders, and keep his head turned on one ſide, as if eying the pool more intently. When the call of hunger returns, the toil of an hour or two is generally ſufficient to fill his capacious ſtomach; and he retires long before night to his retreat in the woods. Early in the morning, however, he is ſeen aſſiduous at his uſual occupation.

But, though in ſeaſons of fine weather the heron can always find a plentiful ſupply; in cold

cold or ſtormy ſeaſons, his prey is no longer within reach: the fiſh that before came into the ſhallow water now keep in the deep, as they find it to be the warmeſt ſituation. Frogs and lizards alſo ſeldom venture from their lurking places; and the heron is obliged to ſupport himſelf upon his long habits of patience, and even to take up with the weeds that grow upon the water. At thoſe times he contracts a conſumptive diſpoſition, which ſucceeding plenty is not able to remove; ſo that the meagre glutton ſpends his time between want and riot, and feels alternately the extremes of famine and exceſs. Hence, notwithſtanding the care with which he takes his prey, and the amazing quantity he devours, the heron is always lean and emaciated; and though his crop be uſually found full, yet his fleſh is ſcarce ſufficient to cover the bones.

The heron uſually takes his prey by wading into the water, yet it muſt not be ſuppoſed that he does not alſo take it upon the wing. In fact, much of his fiſhing is performed in this manner; but he never hovers over deep waters, as there his prey is enabled to eſcape him by ſinking to the bottom. In ſhallow places he darts with more certainty; for though the fiſh at ſight of its enemy inſtantly deſcends, yet the heron, with his long bill and legs, inſtantly pins it to the bottom, and thus ſeizes it ſecurely. In this manner, after having been ſeen with its long neck for above a minute under water, he riſes upon

upon the wing, with a trout or an eel ſtruggling in his bill to get free. The greedy bird, however, flies to the ſhore, ſcarce gives it time to expire, but ſwallows it whole, and then returns to fiſhing as before.

As this bird does incredible miſchief to ponds newly ſtocked, Willughby has given a receipt for taking him. "Having found his haunt, "get three or four ſmall roach or dace, and "having provided a ſtrong hook with a wire "to it, this is drawn juſt within ſide the ſkin "of the fiſh, beginning without ſide the gills, "and running it to the tail, by which the "fiſh will not be killed, but continue for five "or ſix days alive. Then having a ſtrong line "made of ſilk and wire, about two yards and "an half long, it is tied to a ſtone at one end, "the fiſh with the hook being ſuffered to ſwim "about at the other. This being properly "diſpoſed in ſhallow water, the heron will ſeize "upon the fiſh to its own deſtruction. From "this method we may learn that the fiſh muſt "be alive, otherwiſe the heron will not touch "them; and that this bird, as well as all thoſe "that feed upon fiſh, muſt be its own ca-"terer; for they will not prey upon ſuch as "die naturally, or are killed by others before "them."

Though this bird lives chiefly among pools and marſhes, yet its neſt is built on the tops of the higheſt trees, and ſometimes on cliffs hanging

hanging over the ſea. They are never in flocks when they fiſh, committing their depredations in ſolitude and ſilence; but in making their neſts they love each other's ſociety; and they are ſeen, like rooks, building in company with flocks of their kind. Their neſts are made of ſticks, and lined with wool; and the female lays four large eggs of a pale green colour. The obſervable indolence of their nature, however, is not leſs ſeen in their neſtling than in their habits of depredation. Nothing is more certain, and I have ſeen it an hundred times, than that they will not be at the trouble of building a neſt when they can get one made by the rook, or deſerted by the owl, already provided for them. This they uſually enlarge and line within, driving off the original poſſeſſors, ſhould they happen to renew their fruitleſs claims.

The French ſeem to have availed themſelves of the indolence of this bird in making its neſt; and they actually provide a place with materials fitted for their neſtling, which they call Heronries. The heron, which with us is totally unfit for the table, is more ſought for in France, where the fleſh of the young ones is in particular eſtimation. To obtain this, the natives raiſe up high ſheds along ſome fiſhy ſtream; and furniſhing them with materials for the herons to neſtle with, theſe birds build and breed there in great abundance. As ſoon as the young ones are ſuppoſed

ſuppoſed to be fit, the owner of the heronry comes, as we do into a pigeon-houſe, and carries off ſuch as are proper for eating; and theſe are ſold for a very good price to the neighbouring gentry. "Theſe are a delicacy which," as my author ſays, "the French are very fond of, but "which ſtrangers have not yet been taught to "reliſh as they ought." Nevertheleſs it was formerly much eſteemed as a food in England, and made a favourite diſh at great tables. It was then ſaid that the fleſh of a heron was a diſh for a king; at preſent, nothing about the houſe will touch it but a cat.

With us, therefore, as the heron, both old and young, is thought deteſtable eating, we ſeldom trouble theſe animals in their heights, which are for the moſt part ſufficiently inacceſſible. Their neſts are often found in great numbers in the middle of large foreſts, and in ſome groves nearer home, where the owners have a predilection for the bird, and do not chuſe to drive it from its accuſtomed habitations. It is certain that by their cries, their expanſive wings, their bulk, and wavy motion, they add no ſmall ſolemnity to the foreſt, and give a pleaſing variety to a finiſhed improvement.

When the young are excluded, as they are numerous, voracious, and importunate, the old ones are for ever upon the wing to provide them with

with abundance. The quantity of fish they take upon this occasion is amazing, and their size is not less to be wondered at. I remember a heron's nest that was built near a school-house; the boys, with their usual appetite for mischief, climbed up, took down the young ones, sewed up the vent, and laid them in the nest as before. The pain the poor little animals felt from the operation encreased their cries; and this but served to encrease the diligence of the old ones, in enlarging their supply. Thus they heaped the nest with various sorts of fish and the best of their kind; and as their young screamed they flew off for more. The boys gathered up the fish, which the young ones were incapable of eating, till the old ones at last quitted their nest, and gave up their brood, whose appetites they found it impossible to satisfy.

The heron is said to be a very long-lived bird; by Mr. Keysler's account it may exceed sixty years; and by a recent instance of one that was taken in Holland, by an hawk belonging to the stadtholder, its longevity is again confirmed, the bird having a silver plate fastened to one leg, with an inscription, importing that it had been struck by the elector of Cologne's hawks thirty-five years before.

END OF THE FIFTH VOLUME.